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ABSTRACT

Based on an extensive search of the available literature on older workers and their problems, this monograph provides a careful assessment of this literature and highlights some areas where additional research is needed. This report examines demographic changes likely to influence the size and characteristics of the older worker population in the last two decades of this century. A number of critical policy issues are expected to emerge as this sector grows in size and importance, and the report provides statistics and predictions related to those issues, such as (1) the expansion (or lack thereof) of employment opportunities; (2) age discrimination; (3) availability of health services for older citizens; (4) socioeconomic costs of supporting a relatively large retired population; and (5) retirement (both early and delayed) and retirement age policy. Other issues examined in the monograph include health, safety, and aging in the workplace; job performance and training of older workers; and part-time work and tapered retirement. Separate sections focus on the special problems of the older working woman, older minority group workers, and older rural workers. Other sections are devoted to such questions as employer practices, mid-career change, and relevant foreign programs and experiments. (CP)

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Employment-Related Problems of Older Workers: A Research Strategy

R&D Monograph 73

U.S. Department of Labor
Ray Marshall, Secretary

Employment and Training Administration
Ernest G. Green
Assistant Secretary for Employment and Training
1979

This report is based on the study, "A Research and Development Strategy on Employment-Related Problems of Older Workers," which was prepared by Dr. Harold L. Sheppard of the American Institutes for Research under Grant No. 20-11-76-54 with the Employment and Training Administration, U.S. Department of Labor, under the authority of the Comprehensive Employment and Training Act. Researchers undertaking such projects under Government sponsorship are encouraged to express their own judgment. Interpretations or viewpoints stated in this document do not necessarily represent the official position or policy of the Department of Labor. The report was edited by Dr. Florence M. Casey of the Office of Research and Development, Office of Policy, Evaluation and Research, U.S. Department of Labor.

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FOREWORD

This monograph is an edited and condensed version of "A Research and Development Strategy on Employment-Related Problems of Older Workers" by Dr. Harold L. Sheppard of the American Institutes for Research. Based on an extensive search of the available literature regarding older workers and their job-related problems, the monograph provides a careful assessment of this literature and highlights a number of areas in which previous findings indicate the need for additional research and experimentation.

The report also examines the demographic changes likely to influence the size and characteristics of the older worker population in the last 2 decades of the 20th century. As this sector of the population grows in size and relative importance during the next 20 years, a number of critical policy issues are likely to emerge, especially those regarding the expansion of employment opportunities for older persons, age discrimination in the job market, the availability of health services for older citizens, and the socioeconomic costs of supporting a relatively large retired population.

Other issues examined in the monograph include: health, safety and aging in the workplace; job performance and training of older workers; and part-time work and tapered retirement. Separate sections focus on the special problems of the older working woman, older minority group workers, and older rural workers, and other sections are devoted to such questions as employer practices, mid-career change, and relevant foreign programs and experiments.

HOWARD ROSEN
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and Development

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INTRODUCTION

In preparation for the 1981 White House Conference on Aging, it is appropriate that the Department of Labor and other Federal departments and agencies re-examine the employment situation of older workers, starting with a recognition of the important changes in the age structure of the population and the labor force projected for the final decades of the twentieth century. Basically, the relative importance of the younger age-group is expected to decline considerably over the next few decades, while that of persons aged 45 and over increases dramatically.

These significant shifts in the age structure of the population will reflect the combined influence of: (1) the long-term decline in the fertility rate (the number of births per 1,000 women), producing a commensurate decrease in the relative importance of the younger population, and (2) a long-term decline in the mortality rate (the number of deaths per 1,000 people), in large measure the result of improvements in the health-care of middle-aged and older persons. Together, the two factors are likely to bring about major changes in public priorities regarding Social Security and pension coverage, educational investment, housing, transportation, and health services--as well as in a popular culture which has long been youth-oriented (if not youth obsessed).

The aging of the total population will be accompanied by a similar "graying" of the labor force in the years ahead. At the end of the century, those aged 35 to 54 years will represent slightly more than half the working-age population, as the members of the postwar "baby boom" move into their middle years, while those aged 20 to 34 will account for less than 35 percent, in contrast to 45 percent in 1980.

Concurrently, the labor force entry and unemployment problems of younger workers, severe in recent years, may recede in relative importance as the special difficulties of middle-aged and older workers move to the forefront of policy-makers' preoccupations. Not least among these concerns is the possibility that a significant number of older jobseekers will encounter obstacles in obtaining suitable employment or adequate pension coverage, as the economy strains to support more and more persons in full or partial retirement.

This monograph is intended to provide an overview of the general situation and particular problems of older workers, together with some recent research findings which are relevant to present and anticipated labor force issues affecting this age group. Before examining these issues in detail, however, we would like to introduce some general or guiding principles that should be useful in analyzing the job-related problems of middle-aged and older workers.

THE CONCEPT OF A WORK LIFE CYCLE OR STAGES

This principle stresses the notion of career, or a pattern of work experience over several years, a process, instead of a cross-sectional view at one point in time. Several phases are involved:

a) a job seeking phase, in which a person:

- --seeks re-employment after discharge or layoff;
- --seeks a change of employment, even though currently employed;
- --enters the labor force for the first time, or re-enters after an extended period of child-rearing, illness, etc.

b) an employment phase, including:

- --work performance;
- --seeking a change in type of work in the same establishment;

- --being assigned a change in the same establishment;
- --promotion patterns;
- --degree and nature of training opportunities available.

c) a retirement phase including:

- --the impact on the "retirement decision" of job-related experiences during middle-age and the pre-retirement years;
- --the question of whether the retirement is voluntary or not, and at what age it occurs;
- --the impact of personal-demographic factors on the retirement decision (including early intentions, family obligations, level of pension, if any);
- --the impact of these and other factors and experiences on actual retirement status, retirement life expectancy, etc.

THE PROBLEM ACCORDING TO WHAT PERSPECTIVE?

There is, of course, a wide variety of difficulties encountered by the individual middle-aged or older worker or jobseeker--but what may be a problem to the individual may be the very opposite for the employing organization. For example, reluctance to hire older applicants may not be a problem for the employer.

There is also a third perspective which must be considered, namely the needs of the community and/or economy. Early retirement with relatively high income may "solve" some problems for the employing organization and may be extremely attractive to the individual worker, while the aggregate effects of such a pattern on the total economy may or may not be positive (an example might be the excess of expenditures over revenues in the Social Security Trust Fund as a result of large-scale exits from the labor force).

CURRENT VS. FUTURE PROBLEMS

Current problems and conditions regarding the job experience of middle-aged and older workers must be distinguished from those expected in the future. Included in this third general principle is the need to monitor certain trends and intermittent phenomena--for example, the rate at which persons retire under social security before age 65, and the changing conditions that influence such rates; the impact of presumably-improving health conditions on labor force participation of young adults as they move into middle-age and older status; and policies regarding assistance to older victims of mass-layoffs and shutdowns.

COMPOSITION OF THE OLDER POPULATION

The population under study is quite heterogeneous and changes can be expected to occur in its composition over time. This principle is clearly neglected in most statistical reporting in the employment and training field. For example the practice of grouping persons as "45 and over," "25 to 54," and "65 and over" sometimes obscures more than it reveals, and may lead to poor policy and program formulation. Few, if any, reports (outside of certain Social Security publications) include a separate classification for those aged 62 to 64, although one is critically needed, given the current options for retirement under social security.

Equally important is the fact that components of the 65-plus population are increasing at widely varying rates. Between 1975 and 2010, the population 85 and older is projected to increase by over 110 percent, while the projected increase in the 65 to 74 population is less than 40 percent. Research concerning such vital matters as per capita labor costs for each "older" person, or job rights and opportunities for the group aged 65 to 69 cannot be reliable if the data treat those 65 and over as a single group. This same principle applies to "older" components of the under 65 population. We also need to disaggregate the "older worker" classification by such characteristics as: sex; marital status and family size; rural vs. urban residence; industry-occupation mix; and race or ethnicity.

THE PROCESS OF AGING

The process of aging must be considered as distinct from the aged. More pointedly, the "worker growing older" is not the same as "the older worker." The first refers to a process of change, not all of which is decremental. The second refers to a socially-determined chronological age.

Closely related to this principle is the importance of distinguishing between conclusions derived from cross-sectional data, on the one hand, and longitudinal data, on the other. A well-designed study comparing workers of different ages at one point in time is not a solid basis for drawing theoretical or policy conclusions about "what happens to people as they get older."

Even longitudinal studies have their limitations, however. A group of workers aged 45 to 64 in 1956 is quite different from workers of the same age in 1976 regarding such attributes as education, rural-urban origins, occupational distribution, sex-composition, etc. This distinction is sometimes known as the "generational difference."

THE "SURVIVOR" PHENOMENON

The "survivor" phenomenon must be recognized in analyzing job-related experiences and problems of older workers. Research showing no differences in work performance of different age groups, or superior performance by older workers, may reflect no more than the weeding-out of inadequate performers in the older groups prior to the time the research was conducted. Similarly, conclusions regarding factors influencing "retirement rates" may be misleading when the mortality variable is omitted, since only the "survivors" are part of the analysis.

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DEFINING "OLD"

There is no clear-cut, unchanging definition of the term "old." First, the chronological meaning has changed historically, even in designations of the "working age" population. Second, "old" may be defined in non-chronological terms by substantial segments of the public. Third, definitions may focus on the decrements, rather than the increments, associated with increasing age. When decisions are made by public authorities or employers regarding the work status and chances of groups or individuals, such differences in definition assume critical importance.

Similarly, while it is common to classify the job-related problems of middle-aged and older workers as part of the "structural" unemployment challenge, this designation fails to consider the possibility that cyclical unemployment may be transformed into a structural problem. Highly-trained craft workers in declining trades, for example, may become unemployed in the course of a recession, and then remain unemployed even when general economic conditions have improved.

THE "LAG" PHENOMENON

Research on older workers' problems, and policies derived from that research, should be alert to the "lag" phenomenon. Some job-related problems of middle-aged or older workers may emerge months or years after the conditions generating the problems have appeared. As a case in point, applications for disability benefits under social security among older workers too young to be eligible for retired worker benefits tend to rise a few years after a peak in unemployment rates. This general principle is also pertinent to the issue of the indirect and long-term costs of poor working conditions, job-related risks, etc.

COSTS AND BENEFITS OF RETIREMENT

According to Seago, current policy and programs affecting older workers result in the loss of a great number of productive years to the economy. Another researcher estimates that $10 billion is lost annually through the non-use of older workers, calculating the value of the products not available for purchase each year as a result of such persons not being employed to produce them. Moreover, their nonemployment possibly adds to the inflation process by reducing the amount of products and services available to the consumer.1/

The major question here is whether the total economic and social costs of unemployment, underemployment, and labor force withdrawal among older workers (including "premature" retirees) exceed, equal, or are below the benefits claimed from the removal of substantial numbers of older workers from the labor force. Among these claimed benefits is a reduction in official unemployment rates.2/ Another claimed benefit--one that is rarely, if ever, examined--is that it "makes room for younger persons." This claim is frequently heard at the level of the individual enterprise, without regard to possible total costs to the economy or to longer-term, indirect costs to the enterprise itself.

1/ William K. Seago, "Older Worker Utilization," Unpublished paper, Shippensburg State College, November 1975; Jerome Pollack, Age Discrimination, Testimony before House Select Committee on Aging, February 1976.

2/ Juanita Kreps, "The Economy and The Aged," in R.H. Binstock and Ethel Shanas, eds., Handbook of the Aging and the Social Sciences, (New York: Van Nostrand Reinhold) 1976.

According to one conventional viewpoint in labor economics, every older worker leaving the labor force or individual enterprise, has a younger replacement ready and willing to take his or her job--an assumption that is based essentially on the view that there is a fixed quantity of "jobs to be done." But labor force expansion has exceeded even the significant growth in the number of job openings experienced in recent years.

Proponents of a different viewpoint argue that the income reduction experienced by retired workers produces a reduction of purchasing power, and perhaps even an acceleration of inflation, if aggregate retirement income rises without any commensurate increase in the supply of goods and services. To put it another way, the continued employment of older workers at incomes superior to those obtained through retirement benefits would generate production and sustain a healthy demand for labor.

We thus have two conflicting views on the employment effects of labor force withdrawal of older workers. One of them may be incorrect, or each may contain elements and degrees of factuality--but the issues involved are critical enough in any event to warrant further analysis.

RELATIVE CLAIMS OF OLDER AND YOUNGER WORKERS

In the view of some advocates of the job rights of middle-aged and older persons, current government policy seems to place disproportionate stress on the job problems of the young over those of middle-aged and older workers. One result, according to these observers, is the pitting of age groups against each other, or at least the frustration of those organized groups of senior citizens whose interests encompass the jobs issue.

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While it is true that teenage and youth unemployment rates are much higher than those for adult and older workers, according to these critics:

--official unemployment rates may obscure the "real" rate of older age groups, whose numbers include many discouraged workers and premature retirees;

--many members of the retired population, especially those aged 60 to 69, would accept work if offered, or would seek work if convinced that they had a chance;

--duration of unemployment rates is an equally (if not more) sensitive measure of the problems of joblessness as experienced by different age groups;

--the proportions of younger vs. older persons seeking year-round full-time employment are not comparable (i.e., many persons under 20 are seeking part-time and/or temporary work); and

--relatively few of these younger persons are heads of families. Many, indeed, have middle-aged and older parents whose own job security needs strengthening.

Some supporters of the claims of middle-aged and older workers say that, at the very least, there should be a more equitable distribution among age groups of training and employment opportunities within the private and public sectors. Others advocate the replacement of chronological age limits by functional age criteria in making job-related decisions. (This is the theoretical basis of the Age Discrimination in Employment Act, at least for those aged 40 through 69).

At the very least, there is evident need for: a.) empirical verification of the five points listed just above; b). periodic monitoring of trends; and c.) some measure or measures of the relative impact of unemployment on different age groups.

The conventional notion that the old should make room for the young is partly a reflection of cultural norms which are difficult to alter, especially within a short time-period. There is a longer range view that calls attention to the age profile of the American population in future decades and that concludes "time" will solve the issue for us--that continuing low fertility rates will reduce the number of new labor force entrants relative to the numbers of middle-aged and older workers.

But the issues described above and in later sections of this report must be examined from the perspective of both the immediate and the long-term future. It may be necessary now to recognize that a smaller youth group entering the labor force will raise the challenging issue of how large a "dependency burden" should be placed on the working population, especially if no new policy is adopted to affect the number and proportion of older persons retiring. Changes in those policies--and problems that may be entailed in implementing such changes--should not wait to be studied until the demographic "crunch" is already upon us.

LABOR FORCE PARTICIPATION PATTERNS OF OLDER WORKERS

Since the creation of the social security program in the 1930's, age 65 has come to be viewed as the time when most persons could be expected to retire. Although many people do leave the labor force on or around their 65th birthday, the reality is not nearly as clear-cut as the traditional view might lead one to expect. Substantial numbers of men and women work well beyond their 65th year, while the members of another large (and growing) group relinquish employment between ages 55 and 65, or even earlier.

For example, about 30 percent of the men aged 65 to 69 years in August 1978 were still in the labor force, as were nearly 15 percent of women of similar age (table 1). While it is true that the proportion of male labor force participants in this age group dropped from almost 60 percent to about 30 percent between 1950 and 1978, the degree of labor market activity among these presumably retirable persons is still substantial.

Doubtless some of these elderly workers would retire if they could--but they may have inadequate pension coverage or younger dependents, or they may be unwilling to accept the income reduction accompanying retirement. Others, in contrast, have continued working because they wanted to, preferring to remain active (even if only part-time) for reasons that are more personal than financial.

For all male workers aged 50 and over, however, the long-term trend has been toward earlier retirement, in contrast to the generally rising rate of labor force participation among older women. These sex-differentiated patterns can be explained to some extent by the greater concentration of men in physically-demanding occupations, especially in manufacturing, which may inspire a reluctance to continue working past middle-age. Then too, men aged 50 or more typically have been working continuously since their late teens or early twenties, in contrast to the more intermittent employment patterns of some married women of similar age, with the result that many men approach the end of

TABLE 1. LABOR FORCE PARTICIPATION RATES FOR OLDER AGE GROUPS, BY SEX, SELECTED YEARS, 1950-78

Age Group and Year	Men	Women
50 to 54 years		
1950	90.5	30.8
1960	92.0	45.9
1970	91.5	52.4
1978 (August)	89.1	53.8
55 to 59 years		
1950	86.7	25.9
1960	87.7	39.7
1970	86.8	47.6
1978 (August)	83.1	47.7
60 to 64 years		
1950	79.4	20.6
1960	77.8	29.4
1970	73.2	36.4
1978 (August)	61.1	31.7
65 to 69 years		
1950	59.7	12.0
1960	44.0	16.5
1970	39.3	17.2
1978 (August)	30.0	14.2

SOURCES: Bureau of the Census 1970 Census of Population, Employment Status and Work Experience, table 2 for 1950, 1960, amd 1970 data. August 1978 data from Employment and Earnings, September 1978, Table A-3.

their willingness to remain in demanding or unsatisfactory jobs at about the same age that many women resume working outside the home.

But the factors underlying these long-term trends are as likely to be economic as psychological. For the men, the availability of more generous pension coverage, as well as of disability and veterans benefits, no doubt plays a role in encouraging early retirement; for some women, on the other hand, widowhood or marital breakup may force a return to the labor force, while others may resume working to compensate for the lower income levels associated with a husband's early retirement.

Not all middle-aged and older persons still in the labor force are employed full-time, however. Rather, the proportion of part-timers among those aged 55 and over has increased steadily since 1966 and the propensity to work part-time becomes more pronounced with the approach of the 65th birthday.

UNEMPLOYMENT

The most significant labor market problems of middle-aged and older workers arise from the unemployment experience. While it is well known that the unemployment rate is lower among older than younger labor force members, unemployment among senior workers may mean a pronounced reduction in income during the retirement years, especially if the unemployment is prolonged and/or intermittent. That reduction affects not only the older individual and his or her family, but also the general community or economy, to the degree that transfer payments during unemployment are greater than would otherwise be the case.

The unemployed older worker is also more likely to experience major difficulties in the search for reemployment. Aside from the fact that potential employers may discriminate against workers aged 45 and over, the older job-seeker may prolong the job search in hopes of finding a position that matches the previous one in terms of skill requirements, salary, status, and perquisites. At the same time, long-term unemployment may be especially costly for members of this group, who often have younger dependents and substantial financial obligations.

While official reports on unemployment rates and duration are provided each year by age, such important information as the total unemployment of middle-aged and older workers over a number of years, and the number of spells of unemployment, is unavailable. Data from the National Longitudinal Survey (NLS)[3] indicate that, between 1969 and 1971, about 10 percent of the male sample aged 45 to 59 in 1966 had experienced some form of unemployment. Furthermore, "those who had suffered unemployment in 1965 were much more likely than others to experience additional unemployment in the two-year period between the 1969 and 1971 surveys."

During periods of economic recovery, the decline in proportions unemployed 15 or more weeks is weakest among workers aged 45 to 64 years, indicating that unemployed older workers are among the least likely to benefit from economic upturns and the most likely to withdraw from the labor force prematurely as a result of discouragement. For example, the number of unemployed persons aged 25 to 34 years decreased 60 percent from 1975 to 1976, in contrast to only 30 percent for those aged 45 to 54, 21 percent for those 55 to 64, and 15 percent for those 65 years and over.

The longer duration of joblessness among older workers also means that expenditures for unemployment insurance and related social costs are disproportionately distributed among members of this age group. The forced

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3/ Herbert S. Parnes, et al . The Pre-Retirement Years, Center for Human Resources Research, Ohio State University, 1974.

idleness of these experienced and often highly-skilled workers also results in productivity losses, as well as in skill obsolescence in some individual cases.

Beyond their greater vulnerability to prolonged unemployment, older workers constitute a relatively large proportion of the jobless even when general unemployment is low. In 1973, for example, when unemployment rates were rising rapidly, workers 45 years and over constituted 40.5 percent of the insured unemployed; three years later, when overall unemployment had dropped considerably, they still represented nearly 32 percent of the insured unemployed group.

Analysis of longer-term data from the NLS shows that, if unemployed at the time of 1966 survey (or with a job but not working), the males 45 to 57 years old were more likely to be unemployed, out of the labor force, or dead by 1973. This was true even when 1966 health status was taken into account.4/

One of the most significant findings by Parnes and King5/ was that personal characteristics did not help to explain the differential employment status of long-service workers who were permanently displaced and of a matched sub-sample who were not displaced. Race, for example, was not relevant; neither was length of schooling or occupation. Instead, the critical factor appeared to be the industry in which the worker had been employed.

Trade and manufacturing stood out as above-average in their exposure to the risks of permanent displacement, while public administration jobs turned out to be the most secure.

4/ Harold L. Sheppard, "Factors Associated with Early Withdrawal from The Labor Force," (Washington: American Institute for Research) 1976.

5/ Herbert S. Parnes and Randy King, "Middle-Aged Job Losers," in Industrial Gerontology, Spring 1977.

The Parnes and King study also found that wage levels, on the average, were lower for the re-employed displaced. Moreover, "Health deterioration between 1966 and 1973 appears to have been somewhat more common and improvement somewhat less common among the displaced workers than with the control group." Furthermore, alienation (as measured by feelings of a sense of powerlessness) and a loss of initiative and self-confidence (as measured by the Rotter internal-external control scale) were experienced more often by the displaced middle-aged workers than by the controls.6/

Other studies have noted the same psychological and physical reactions among unemployed middle-aged workers. For example, Cobb and Lasl report rises in blood pressure among those remaining unemployed, and decreases for those finding new jobs. The rises in blood pressure "were of the order of magnitude of change resulting from ten years of aging." They also found that cholesterol levels rose with unemployment and fell with reemployment. It should be noted that the Cobb and Lasl study was restricted to a short time period after the plant termination, and that still sharper differences between the unemployed and re-employed may appear over a longer period of time.7/

Among the other costs of such experience for middle-aged and older men--especially those not soon reemployed--was a drop in their hopes of gaining any economic security and in feelings of optimism regarding their future. Foltman, in his 1968 study of a shutdown in the Buffalo labor market area, reports in this connection:

6/ Ibid.

7/ Sidney Cobb and Stanislav Lasl, "Some Medical Aspects of Unemployment," in G. Shatto, ed., Employment of the Middle-Aged, (New York: Charles Thomas & Company) 1972.

> To adjust to having to find another job at age 45 would appear to be doubly difficult for many men, since it is during middle age that the process of adjusting to unfulfilled expectations, hopes, and ambitions may also begin. At middle age, some find that for them life is ending rather than beginning. 8/

The critical principle that needs to be stressed here is that health must be treated as something affected by the job experience itself, and not merely the reverse.

DISCOURAGEMENT

Unemployed older workers are much more likely to abandon the job search and withdraw from the labor force than are members of other age groups. When the total number of workers identified as discouraged (wanting a job but believing they cannot get one) declined from 1976 to 1977, the number of older workers so classified actually increased.

Labor force withdrawal as a result of discouragement is a process that still requires considerable study, in terms of both social and economic costs and its effects on the individual worker. No doubt it adds to the costs of welfare and retirement programs, especially the social security system, while depriving the economy of many useful, highly-trained workers. It also contributes to skill atrophy and may well reflect a marked sense of alienation and loss of self-esteem on the part of the worker who has abandoned a long and unsuccessful job search. The same worker may be poorly prepared, psychologically as well as economically, for retirement undertaken in such conditions.

8/ Felician F. Foltman, White and Blue-Collars in a Mill Shutdown (Ithaca, N.Y.: Cornell University) 1968.

During the 1973-1975 recession, the official count of discouraged workers (those not seeking work because of a belief that no jobs are available) showed a doubling of such persons aged 55 to 64, while the rate of increase for the total group was 73 percent. Unpublished BLS first-quarter data for 1973 and 1977 show that, in the latter year, the total number of discouraged workers of all ages both male and female, was still more than 50 percent greater than in early 1973, when unemployment was only 4.9 percent. The age-sex groups in the 45-plus population experiencing a more than 50-percent increase over the four-year period were as follows:

Age-Sex group		Percent increase, 1973-1977
Men,	45-54	162.5
Women,	45-54	59.4
	55-64	60.4
	65 and older	91.4

These figures point to the special problems of the 45-54 group of older male workers, which are stressed in several other sections of this report. But for each age group among women 45 and older, the increase exceeded the overall growth of the discouraged worker population. For many men 55 and older, it can be surmised that they "moved" from being unemployed into being discouraged, and then were self-defined as "retired." However, the nature of the BLS data is such as to preclude any safe conclusions regarding the actual processes involved in the shift from unemployment to retirement, which would require longitudinal examination.

We know very little about the characteristics of the various age groups, by sex and color, in the discouraged worker population. What were their previous occupational and industrial attachments? How do they "survive" without employment, and on what personal or community resources do they draw in their struggle for survival? From year to year, are they the same individuals?

There is also a need for more documentation of the social costs of older worker discouragement by age, but this effort is limited by the quality of the statistical information available. For example, BLS data regarding discouraged workers often show a very broad 25 to 59 age classification and another for those 60 and older. Given the fact that the 25 to 59 classification may represent as much as one-half the total number of discouraged workers, it should be possible to provide more detail.

What is also needed, over and above cross-sectional enumeration of discouraged workers, is reliable information regarding the process of being discouraged, which involves the concept of a continuum in degree of persistence in jobseeking prior to dropping out among persons of different age groups. This would require studies of a longitudinal nature, which should also include attention to those factors that may hinder or facilitate the discouragement process, including:

--national and local economic conditions;

--personal characteristics, both demographic and social-psychological;

--marital status; and

--nature and degree of "social supports" available.

UI EXHAUSTEES

Long-term unemployment among older workers is associated not only with a greater probability of becoming discouraged and dropping out of the labor force, but also with a greater likelihood of exhausting unemployment compensation benefits. Older persons, both male and female, are a disproportionately large segment of UI exhaustees. In a 1975 study of exhaustees, roughly 70 percent of those exhausting benefits were 45 and older in most of the States examined. Such data merely confirm the point that long-term unemployment is a greater risk for unemployed middle-aged and older workers.

Beyond such cross-sectional research, there is a need to trace both younger and older exhaustee groups over time with respect to: re-employment, types of re-employment, and job careers relative to non-exhaustees and to employed population of the same age.

Connected with the topic of UI exhaustion is the argument that prolonged unemployment is "encouraged" by extended weeks of eligibility for unemployment compensation.9/ This issue remains unresolved. To some extent, differing conclusions may be derived from the use of different methods of analysis.

9/ Martin Feldstein, "The Unemployment Caused by Unemployment Insurance," Proceedings of the Twenty-Eighth Annual Winter Meeting, Industrial Relations Research Association Series, Dallas, Texas, 1975.

A study based on interviews with a sample of persons formerly or presently unemployed over a 15-month period found that UI weeks of eligibility did not tend to prolong unemployment among male blue-collar workers. Among workers still unemployed, more than one-half had no more benefit weeks remaining, in contrast to a much lower percentage of the re-employed. This is contrary to the hypothesis that workers without any benefit weeks remaining should have returned to work at a rate higher than that for workers with benefit weeks still remaining.[10]

Further attempts to examine the experience of UI recipients and exhaustees should include the age variable, with special attention to such additional factors as skill-level, marital status, number of dependents, labor force status of other family members, nature of the labor market area (including overall unemployment rates), and other personal characteristics. Such research would help to determine the feasibility or wisdom of providing special unemployment compensation privileges for older unemployed workers--privileges which are available in many other countries.

RESPONSES TO ECONOMIC RECOVERY

In times of economic recovery, one might suppose that older workers participate to the same extent as other age groups in improved employment opportunities. However, Rosenblum did not find this to be the case for those 55 and older during the 1975-76 recovery.[11]

Using a longitudinal approach, another study found that, over a one-year period characterized by a general decline in joblessness, the older the male blue-collar worker, the lower the rate of decline in long-term unemployment. The study included only those remaining in the labor force, excluding the discouraged worker group and those dropping out of the labor force because of reported illness.12/

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[10] Harold L. Sheppard and A. Harvey Belitsky, The Job Hunt (Baltimore: The Johns Hopkins Press) 1966.

[11] Marc Rosenblum, "Recession's Continuing Victim: The Older Worker," Senate Special Committee on Aging, 1976.

Data on the age distribution of the insured unemployed also reveal that the impact of the 1975-76 recovery was not evenly distributed by age group. In June 1975, less than 15 percent of the insured unemployed population was 55 and older, but the proportion had risen to more than 17 percent by June of the following year. The "double jeopardy" experienced by minority group workers is revealed by the fact that the proportion of insured unemployed blacks who were 45 and older increased during that period.

UNEMPLOYMENT AND EARLY RETIREMENT

The influence of general employment conditions on early retirement can be gleaned from BLS data on changes in numbers out of the labor force relative to changes in numbers of employed and unemployed for each year. Table 2 indicates by age, sex, and race the relative rates of changes in numbers employed and not in the labor force for 1975-76, during which the overall unemployment rate declined, and 1974-75, during which the prevailing high rate continued to increase.

For white men, starting with those aged 35 to 44, 1975-76 witnessed a greater rate of increase in numbers not in the labor force, compared to growth in numbers employed. As a matter of fact, little if any employment increase took place at all among those 35 and older. For minority men 45 and older, the trend was similar, while employment increased for those under 45.

12/ Sheppard and Belitsky, *op. cit.*

TABLE 2. RATES OF CHANGE IN NUMBERS EMPLOYED AND NOT IN THE LABOR FORCE, 1975-76, and 1974-75, by RACE, SEX, AND AGE

Age, Sex, and Race	1975-76		1974-75	
	Not In Labor Force	Employed	Not In Labor Force	Employed
Men				
White, 16 years and over	+3.1	+2.2	+5.3	-2.2
20 to 24 years	-2.7	+6.2	+11.8	-3.6
25 to 34 years	+1.7	+4.6	+18.9	+0.3
35 to 44 years	+10.7	+1.3	+9.1	-2.4
45 to 54 years	+5.0	-0.7	+1.3	-2.5
45 to 64 years	+6.4	+0.2	+8.8	-2.4
65 years and over	+3.9	-4.8	+3.0	-3.1
Black and Other, 16 years and over	+6.2	+3.3	+9.8	-4.5
20 to 24 years	+4.6	+7.8	+25.8	-9.2
25 to 34 years	+14.8	+5.0	+17.4	-1.0
35 to 44 years	-3.8	+3.8	+10.9	-4.5
45 to 54 years	+9.9	+1.9	+1.7	-4.1
55 to 64 years	+11.1	-2.9	+7.1	-2.6
65 years and over	+5.4	-1.9	+5.2	-4.2
Women				
White, 16 years and over	-0.4	+4.5	+0.1	+0.5
20 to 24 years	-0.6	+4.0	-2.3	+1.0
25 to 34 years	-1.7	+8.7	-1.6	+5.4
35 to 44 years	-4.1	+5.9	-2.7	-0.1
45 to 54 years	-1.7	+0.5	-0.5	-2.8
55 to 64 years	+1.2	+1.9	+0.8	0
65 years and over	+2.5	+1.3	+2.6	+1.5
Black and Other, 16 years and over	+1.2	+5.6	+3.0	-0.3
20 to 24 years	0	+7.7	+8.7	-5.0
25 to 34 years	-5.6	+11.7	+4.0	+1.5
35 to 44 years	+1.3	+3.7	+0.5	-0.5
45 to 54 years	0	+3.2	+1.9	-1.4
55 to 64 years	+2.5	0	+1.8	+1.2
65 years and over	+3.6	+12.5	+4.0	-7.7

SOURCE: Employment and Training Report of the President, 1977, Tables A-11, A-14.

White women 55 and older experienced a continued increase in numbers out of the labor force, in contrast to younger women in both periods. For minority women, however, the picture is less clear. For example, for those 65 and older, the numbers out of the labor force increased from 1975 to 1976, but at a much lower rate than the rate of increase in numbers employed. No increase occurred in numbers employed among the 55 to 64 year-olds, but there was an increase of 2.5 percent in numbers not in the labor force.

For the three-year period 1973-76, the total numbers of men employed increased only in the under 35 category, but still at a much lower rate of increase than in the numbers not in the labor force (table 3).

The fact that the numbers not in the labor force increased nearly 21 percent among men in the 45 to 54 age group is itself significant enough to warrant some detailed empirical inquiries. By 1976, there were nearly one million such men. Since this age group is not usually thought to be in the "retirement years" the search for the reasons for the large increase among those not in the labor force must go beyond explanations relating to health status, pension opportunities, and the like.

Table 3 also reveals that, contrary to the experiences of men, the number of women not in the labor force decreased for some age groups, all of them under 55, and that numbers of women employed increased for more of the age groups than was the case for men.

TABLE 3. CHANGES IN NUMBERS EMPLOYED AND NOT IN THE LABOR FORCE 1973-76, by SEX AND AGE

Age and Sex	Not in Labor Force	Employed
Men, 16 years and Over	+12.4	+0.8
25 to 34 years	+24.9	+8.6
35 to 44 years	+24.1	-1.2
45 to 54 years	+20.8	-2.3
55 to 64 years	+22.8	-2.3
65 years and over	+10.5	-7.0
Women, 16 years and Over	+0.3	+8.2
25 to 34 years	-3.7	+23.9
35 to 44 years	-7.8	+8.1
45 to 54 years	-3.4	+0.3
55 to 64 years	+3.3	+0.9
65 years and Over	+8.9	-1.8

The policy implications of these sex-differentiated patterns will remain unclear as long as there is no consensus regarding the social and economic costs and benefits associated with being employed versus not being in the labor force at all for different sex-age and marital-status groups.13/ For example, it is not altogether certain that all of the increase in labor force participation among middle-aged and older married women is a positive social phenomenon, since some may have sought jobs to compensate for income losses associated with a husband's death, ill health, or retirement.

13/ It should be noted that the two tables discussed here do not distinguish sub-age-groups within the 55-64 and the 65-plus classifications. For the former, it is critical to have precise information about the groups aged 62 to 64, because of their eligibility under social security. For the latter, the present classification is of little use, partly because of the heterogeneity of the age group, partly because the female population aged 65 and over tends to be older than the corresponding male population.

SPECIAL PROBLEMS OF OLDER WORKERS

The factors underlying the patterns of labor force participation described in the preceding section are multiple and do not always lend themselves readily to cause-and-effect analysis of older workers' behavior. However, for purposes of discussion, they can be grouped under such varied rubrics as: changes in the economy, educational attainment levels, health status, job performance and training, and discrimination. In addition, some older workers--women, minorities, and rural residents--experience special pressures that operate to their further detriment.

CHANGING ECONOMIC CONDITIONS

The difficulties experienced by unemployed older workers in finding suitable jobs and the slower responses of this group to upswings in the business cycle have been described in an earlier section. Another aspect of the national economic climate which seems to have special impact on older workers is long-term change in the economy's industrial composition. New and emerging industries have tended to recruit younger workers (as well as substantial numbers of white-collar women) with higher levels of schooling than those commonly required of workers in the primary and secondary sectors. The result has been a gradual concentration of the more educated male workers under 45 in such industries as petrochemicals, electronics, and data processing, while more than half of those 45 and over are to be found in such industries as agriculture, mining, construction, and automotive and steel manufacturing.

By contrast, older women have found it far less difficult to gain entry to new industries and the services sector, via clerical employment and social services. In fact, the availability of white-collar jobs in this sector has contributed in significant measure to the long-term rise in female labor force participation in most age groups.

Local economic conditions also influence the participation patterns of older workers. Localized recessions or plant shutdowns can precipitate a decision among many older workers to retire early or withdraw in discouragement from the labor force--a decision which is often reinforced by the relative immobility of persons in this age group, who are less likely to pull up stakes, abandoning friends, family, and home in the search for employment. Moreover, older workers do not necessarily reenter the labor force once the local unemployment rate declines; they may prefer to remain in retirement rather than accept jobs lower in salary and perquisites than the ones they held previously.

EDUCATIONAL ATTAINMENT

Educational deficiencies are closely associated with nonparticipation in the labor force, and for many years the relatively limited educational attainment of older workers played an important role in explaining labor force withdrawal among persons aged 45 and over. However, the education gap between older and younger workers has narrowed considerably in recent years; in 1976, 60 percent of workers aged 55 to 64 and 85 percent of those aged 25 to 34 had high school educations, compared with 40 and 70 percent, respectively, 10 years earlier. Older workers, therefore, should now find it easier as a group to assimilate and adapt to new technology than was the case for their predecessors. Employers, too, have less reason to refuse to hire older workers on the grounds of limited educational attainment.

Regarding the impact of education on duration of unemployment Arnold Katz came to somewhat intriguing and contradictory conclusions in an analysis of Census and BLS data on white married urban males;

1.) Among young (25 to 34) men, the lower their educational level, the greater the length of unemployment.
2.) The opposite held true in the case of men of similar background aged 45 to 54: "the mean length of unemployment is often higher for workers with above-average schooling. The net result is that workers with the most schooling also experience the severest lengthening of unemployment with age."14/

Thus, schooling may contribute to age differences in unemployment in two separate ways. Young workers have an edge because of longer schooling. Older workers compensate by experience and training, but these advantages appear to be offset when competing for the highest-skilled jobs--a finding which underscores the need for applying a life-cycle, or developmental, approach in studying this problem.

The study by Katz also suggests that more highly-educated older unemployed workers are less willing to accept new jobs at levels below their previous employment positions; they may also have greater fears of relative deprivation, and possibly greater financial obligations --all of which may work against the individual in his or her jobseeking behavior. We cannot rule out the role of self-selective influences in the re-employment experience of such persons, regardless of socioeconomic status.

14/ Arnold Katz, "Schooling and Unemployment," in Industrial and Labor Relations Review, July 1974.

HEALTH STATUS

Health status is one of the most important factors conditioning the retirement decision; it is not surprising, therefore, that in 1976 over 60 percent of 45 to 54 year-old male nonparticipants in the labor force left their last jobs because of ill health or disability (and less than 15 percent of this group indicated an intention to seek reemployment).

However, health status appears to be only one factor among several, including education, income and occupational status, which together condition an older person's continued willingness to work. An additional complication is the fact that ill health may result from retirement, as well as cause it. Abundant evidence indicates that the sudden change in habits and the drop in income associated with retirement have negative physical and emotional consequences among many retirees.

JOB PERFORMANCE AND TRAINING

Contrary to popular views, research findings indicate that job performance and productivity are just as high among older workers as among their juniors. In fact, greater variation exists among the members of each age group than between the groups themselves.

Such findings point to the desirability of using functional, rather than chronological, age as a basis for employment decisions regarding older workers. That is, workers should be judged on the basis of their individual capacity to perform a job, rather than by applying such artificial standards as age (or, for that matter, formal education). However, employers still appear to be largely ignorant of recent research findings regarding functional age.

The higher educational attainment levels of today's older workers, combined with accumulating evidence of their retained ability to meet high performance standards, carry clear implications regarding the desirability of training and educating senior members of the labor force. Since learning skills appear to decline insignificantly with age, employers should have no hesitation in opening training and education opportunities (including opportunities for midcareer occupational change) to workers who have reached their middle years. Again, however, employers have not really exploited these possibilities, even though such training efforts might reduce turnover and lead to more advantageous use of available skills.

Some older workers may be reluctant to enter training programs, partly because their learning skills are inadequate, partly because they expect to experience greater difficulty than younger workers in acquiring new information. However, recent modifications in training methods have been designed to increase success among older trainees with learning deficiencies; moreover, the lack of evidence that job-related physical and mental abilities decline significantly up to the age of 60 and beyond indicates that most older workers face no competitive disadvantage when placed in training programs alongside younger workers.

In any event, the alleged reluctance of older workers to enter training programs may be exaggerated. According to a 1974 Louis Harris survey, nearly half the employed respondents between 40 and 54 years of age expressed interest in learning new skills and in participating in job training programs, as did 37 percent of those 55 to 64 years old.

DISCRIMINATION

Although over 10 years have elapsed since passage of the Age Discrimination in Employment Act (ADEA) of 1967, the available evidence points to the continued existence of discriminatory patterns affecting senior workers in skilled and professional, as well as in lower-skilled, occupations. The act was amended in 1978 to extend protection against age discrimination in employment to persons 65 through 69 years of age. Prior to the amendments, such protection under the ADEA was limited to individuals 40 through 64 years of age. The amendments prohibit compulsory retirement of individuals below 70 years of age, and eliminate entirely any upper age limit for Federal employment. However, exempt from the protection against compulsory retirement of persons 65 through 69 are (1) executives (other than Federal employees) entitled to a retirement benefit of $27,000 per year, and (2) college and university faculty members who have unlimited tenure.

The most frequently-encountered type of ADEA violation is in advertisements of job openings where age requirements are indicated explicitly or implicitly. The bulk of these violations typically occur in four major industrial groups: manufacturing; retail trade; services; and transportation, communications, and utilities.

State and local governments became subject to ADEA provisions in 1974, and several States have since eliminated any upper age limit in public employment, or have raised the limit to 70 years.

A related issue is that of mandatory retirement. With a change in the traditional age-limit, employers will no doubt have to develop more objective criteria for determining the continued employability of senior workers. Their problems in this regard are likely to be lessened if they apply the same criteria in making decisions regarding younger workers.

Elimination of mandatory retirement age limits is also likely to alter patterns of reliance on social security and public or private pension funds--but it is too early to predict the direction these changes might take. If employers adopt functional criteria for determining employability, some workers may be forced to retire even before the age of 62, while others may still be gainfully employed at age 70 or beyond. Whether these different pressures on pension funds will "average out," or result in greater or lesser demand for benefits is impossible to tell at this juncture.

In any event, such a change will not automatically reduce the importance of legislation prohibiting age discrimination in employment. Many workers will still believe that age was the sole factor in determining their dismissal, their failure to be hired or promoted, or their involuntary retirement, and will seek redress under the provisions of the ADEA.

Much of the concern over age discrimination in employment stems from rather sparse evidence derived from either case studies of the reemployment experience of workers affected by mass lay-offs and shutdowns, or from anecdotal reports.15/ It is not possible to report here the findings of all the case studies,16/ some of which are cited in the special references section at the end of this report. All of them find one or more type of discriminatory treatment of older displaced workers, including continued or intermittent unemployment, downward occupational and/or earnings mobility, fewer and less varied services from employment agencies, etc.

15/ See special references section devoted to the discrimination issue at the end of this report.

16/ For the most recent summary of several such studies, see William Haber, Louis Ferman and James Hudson, The Impact of Technological Change (Kalamazoo, Michigan: W.E. Upjohn Institute for Employment Research) 1963.

One significant point that should be made regarding these studies is that few, if any, were conducted since the passage of ADEA. We mention this partly because the report on the Packard shutdown of twenty years ago17/ found that the re-employment experience of the displaced factory workers was far more favorable by race than by age. The authors attributed this to the fact that the State of Michigan at that time had an effective FEPC law, but no similar law regarding age discrimination.

Discussion of the age discrimination issue unavoidably reintroduces reference to the proposition that the problem is essentially a "structural" one, that age is simply a proxy for more relevant variables, such as level of education and skill. But in a multi-variate analysis of hard-core unemployed, Wachtel found that, of eight variables in the employment status of these persons, age was still the fourth most influential one. At the opposite end of the socio-economic continuum, a study of engineers and scientists laid off in more than 60 West Coast defense plants concluded that age was a critical factor in length of unemployment--even when measures of technical competence and education were taken into account.18/ The same study found that age was also the most significant factor in their selection for layoffs.

17/ Harold L. Sheppard, Louis A. Ferman, and Seymour Faber, "Too Old to Work-Too Young to Retire," Senate Special Committee on Unemployment Problems, 1959.

18/ Howard M. Wachtel, "Hard-Core Unemployment in Detroit," in Proceedings of the Industrial Relations Research Association, 1965; R.P. Loomba, "A Study of the Re-Employment and Unemployment Experience of Scientists and Engineers Laid Off from 62 Aerospace and Electronics Firms in the San Francisco Bay Area During 1962-1963" (Washington, U.S. Department of Labor, Manpower Administration) undated.

In their Job Hunt study, Sheppard and Belitsky found that, among the male blue-collar workers not called back to their old jobs, the lowest rate of continued unemployment was among those aged 29 to 38, and that the rate increased by age thereafter:

	Age Group			
Percent	18-28	29-38	39-47	48 and older
still unemployed	18	15	32	45

They also found that all of the still-unemployed skilled workers were 39 and older, while all of the younger skilled workers were re-employed. However, if workers were called back at all, skilled workers were more likely to be favored.[19]

To repeat, such findings and generalizations are derived from either case studies of shutdowns, or from samples restricted to one area at one point in time. A national study based on a large representative sample of recently and currently unemployed persons over a wide age span is required if age discrimination patterns are to be examined more thoroughly.

All of the above discussion has had to do with discrimination regarding unemployed persons, primarily men. The other areas in which such differential treatment needs examination are: 1.) situations involving employed persons seeking new employment elsewhere, or persons seeking to re-enter the labor force; and 2.) at the enterprise level, promotion rates and related measures pertaining to the internal labor market.

19/ Sheppard and Belitsky, op. cit.

There is another dimension of age discrimination that may be of significance, namely, perceived discrimination on the part of different age-groups of workers themselves. The 1964 University of Michigan national survey of employed persons estimated that more than a half million workers 45 and older reported discrimination on the job.20/

In 1974, the Harris survey for the National Council on the Aging reported that 80 percent of the national sample believed that "Most employers discriminate against older people and make it difficult for them to find jobs." Unfortunately, the survey did not distinguish respondents by labor force status or by age group. It did find that, among respondents aged 18 to 64 with responsibility for hiring and firing, the proportion perceiving discrimination was higher, 87 percent. The finding is relevant to the later discussion dealing with the role of employer attitudes and perceptions in the job-related problems of middle-aged and older workers.21/

While research seeking more objective measures of age discrimination is of critical importance, we cannot exclude the dimension of perceived discrimination for at least two reasons. First, such perceptions on the part of individuals generally have some basis in reality.

20/ The University of Michigan, Survey Research Center, Survey of Working Conditions (Ann Arbor) 1971.

21/ Louis Harris and Associates, The Myth and Reality of Aging in America, 1974.

For example, the special analysis by Parnes and King of two carefully-matched subsamples of middle-aged displaced versus job-secure males found that perceived age discrimination was twice as great among the displaced as among the control sample. Second, perceived discrimination results in a reduced tendency to pursue new jobs, or to invest in training or education in order to qualify for new positions. In other words, the behavior of workers is generally influenced by their expectations of actual achievement.

These findings suggest the need for more systematic examination of perceived discrimination by industry, occupation, and type of urban area. Changes in such perceptions (and in the actual status of persons of different ages) should also be monitored regularly to ascertain progress, if any, in this area.

THE OLDER WORKING WOMAN

As women have become a more significant segment of the labor force, the problems of older working women have grown in importance. Chief among these are the following:

- --longer average duration of joblessness than for men of similar age;
- --greater propensity to discouragement and withdrawal from the labor force, once unemployed;
- --less likelihood that they will receive adequate retirement income;
- --shorter job tenure and higher representation among the unemployed than is the case for men of similar age;
- --forced entry or reentry into the labor force as a result of widowhood, marital breakup, or inadequate pension coverage;
- --the need for training or retraining, as well as for occupational "socialization," after many years out of the labor force;
- --the combined impact of sexism and ageism as persisting barriers to the employment and promotion of older women;
- --"retrogression" in economic and occupational status between first and current jobs among women reentering the labor force after years of absence;
- --the greater "regressive" impact of social security payroll taxes on the wages of older women, because of their concentration in lower-paying jobs;
- --the greater risk of being "too old" to work and "too young" for adequate unemployment insurance, because of little accumulated work experience.

It is of more than passing interest that preliminary findings from a current AIR study of a national sample of 1,000 men and women 48 to 52 years old indicate that, out of 15 factors associated with the quality of life, work was the most important influence among women, but only the third most important among men. While other studies indicate that work is a greater source of stress in the lives of middle-aged men than of women, there is accumulating evidence of an upswing in the importance of work as an element in the lives of women, especially among those with continuing attachment to the labor force.22/ This development may influence such spheres as the retirement decision, early retirement rates, and degree of acceptance of mandatory age-at-retirement practices.

The rising labor force participation rate of women accompanied by an opposite trend for men, especially in the middle and older age groups, is a phenomenon that has many research and policy implications. In what ways, if at all, are these two opposing trends related to each other? Are women actually taking the place of older men, on a job-by-job, occupation-by-occupation, industry-by-industry basis? Does the current EEO emphasis on the employment rights of women, regardless of age, result in the reduction of opportunities for older men? Or is the rise in women's participation rate essentially the result of the growth of occupations traditionally held by women and the simultaneous decline of those traditionally filled by men?

22/ Margarie Fiske Lowenthal, et. al., Four Stages of Life (New York: Tossey-Bass) 1975.

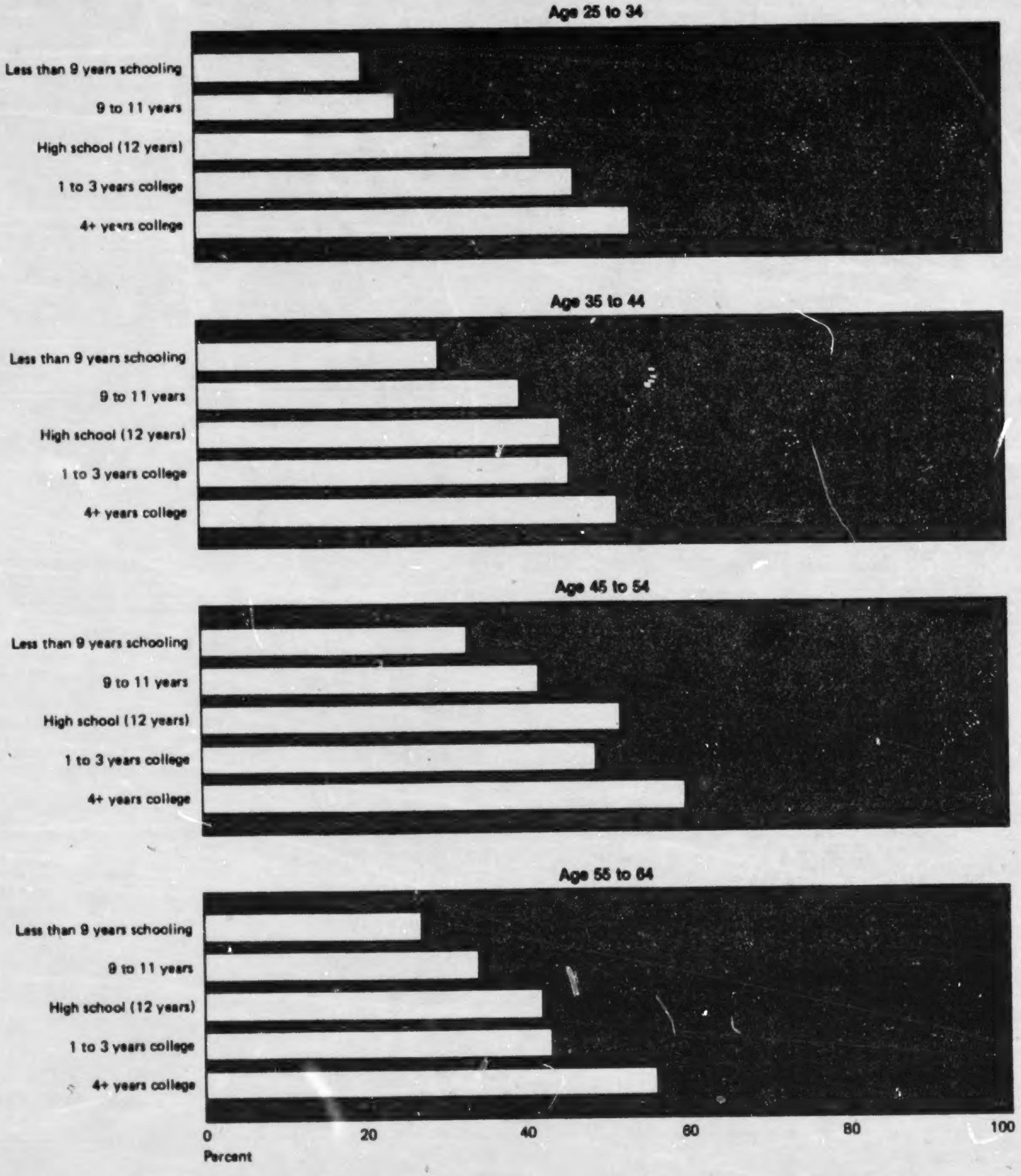
As Oppenheimer has pointed out, men and women have been "used" interchangeably in some occupations over recent decades, but "most demand for labor has usually been sex-specific," that is, the rising participation rate of women is, to a considerable degree, a function of the pattern of economic development which has characteristically moved the demand for labor toward those service occupations and industries historically associated with "women's work."23/ Other explanations, such as reduced fertility, higher education, urbanization, etc., may all be relevant, but the economic development factor must also be reckoned with.

How feasible is it to break up the general pattern of occupational sex-typing in order to maintain or increase the participation opportunities of older men? Is the current effort to change the "sex identity" of certain occupations primarily one-sided, i.e, directed toward placing women in traditionally male positions, rather than toward placing persons without regard to sex? On this latter point, internal labor market situation might be the best sites in which to study the question.

Although each year since World War II has witnessed a rising proportion of women aged 45 and over in the labor force, the proportions of women working year-round full-time show a clear relationship to amount of schooling (Chart A.) Within each age group, including the key group aged 45 to 64, the higher the educational level, the greater the proportion of women working on a year-round full-time basis. Moreover, at each level of schooling, the median income of the older women, especially those aged 45 to 64 is equal to or greater than the income of younger women.

23/ Valerie K. Oppenheimer, "Demographic Influence on Female Employment and the Status of Women," in Joan Hamber ed., Changing Women in a Changing Society (Chicago: University of Chicago Press) 1973.

Chart A. Percent of women working year-round full-time, by age and education, 1974



Source: Census Bureau, Current Population Reports, P-60, No. 101, *Money Income in 1974 of Families and Persons in the United States*, 1976. Table 58.

The importance of marital status of older women in determining labor force participation rates is partly apparent in the 1969 Retirement History Study of the Social Security Administration. Despite their eligibility for retired worker benefits at age 62, one-half of the nonmarried women were still in the labor force. If they were widows, the proportion was only 42 percent, in contrast to 62 percent of those never married. Unfortunately, the study did not include wives with previous or current attachment to the labor force. In any event, trends in participation (or retirement) warrant monitoring on a systematic basis over the short- and long-run, including the rates of married women in this age group. Research should also include consideration of educational and occupational levels simultaneously with marital status as factors associated with trends in labor force participation.

We have little information on the "job adjustment problems," if any, of the middle-aged housewife who enters the labor force and finds employment. For those previously employed, does this experience facilitate the acquisition of new substantive and adaptive skills, as compared to: a.) those without previous job experience, and b.) to those women of the same age with long years of uninterrupted employment?

The higher the educational level, the smaller the gap between labor force participation rates of older married and other women. How far this "gap-narrowing" will go is still not clear, and requires regular research monitoring. Does part of the explanation lie in differences in opportunity structures according to education? Is it because higher education is associated with having fewer children, thus making such women more available for employment? Are there other sociocultural values involved--such as careerism--that distinguish the upper socio-economic groups of married women? In what ways do all these and other factors interact to produce the higher participation rate of married women with greater education? Finally, what are the average retirement ages of such married women relative to all others, including men? We cannot assume, without empirical research, that parity between the sexes will produce parallel retirement plans and decision-making.

Comparisons between 1964 and 1974 data reveal that, among married women 55 to 64 years old, participation rates rose with each level of schooling, with the exception of those with four or more years of college.24/ For this group, the drop in participation was quite marked (from 59 to 50 percent) while the rate for other women remained relatively unchanged, thus increasing the gap.

It may also be critical to explore the reasons for, and the implications of, the general increase in participation rates for married middle-aged women (45 to 64), accompanied by a general decrease in rates among widowed, divorced, and separated women over the past dozen years, even in the higher educated groups.

Because the greatest rate of change in female labor force participation has been occurring among married women, it is important to note the percentage working part-time or part-year. For 1971 and 1975, the proportions of married women, by age, with any work experience who were employed less than 27 weeks, were as follows:

	1971	1975
All women, 16 years & over	23.7	20.7
Married, spouse present	22.8	19.8
24 to 44 years	24.3	21.5
45 to 54 years	15.0	12.9
55 to 64 years	15.0	12.1
65 and over	30.9	25.5

24/ U.S. Department of Labor, Bureau of Labor Statistics, Special Labor Force Reports on Educational Attainment of Workers, 1964 and 1974. By 1976, the participation rate for this group rose slightly, to 53 percent.

Since these percentages are based only on those with work experience, it is not clear whether the downward changes are a function or an increase in full-time job opportunities, or of a general decrease in opportunities as the result of cyclical changes. Also, to our knowledge, little is known about the relationship between (1) changes in the labor force participation rates of different age groups of married women (and/or proportions working or seeking full-time employment, etc.), and (2) the employment status of their husbands. We should add, too, the influence of rates of change in inflation, insofar as efforts to maintain a given family standard of living may require the wife to seek employment.

Finally, with regard to labor force participation, no attempt to carry out projections of participation rates of middle-aged and older women should ignore those factors that may function, over time, as possible deterrents or facilitators of their continued participation in the work force. For example, in professional and technical classes, a middle-aged or older couple may have to make a trade-off between dual employment and higher taxes. In cases where the couple decides the marginal return is not sufficient to warrant a second person working, who shall stay in the labor force?

To take another example, will it be as safe in the future, as it was nearly 10 years ago, to assert that retirement for older married working women will be defined in terms of their husbands' withdrawal from the labor force? (This was a major reason given by the Social Security Administration for excluding married women from their Retirement History Study, begun in 1968.)

Older female heads of families. From 1970 to 1975, the labor force participation rates of 45 to 64 year-old female heads of families declined, in contrast to those of married and all other women.25/ There are no definitive explanations for this pattern, nor anything that tells us much about the problems, if any, accompanying the trend. What is there about the circumstances of such middle-aged and older female family heads that explains their declining participation rates, relative to younger female heads, and to other women of the same ages? Is the decline indicative of special difficulties faced by them and their families? Once such information is obtained through careful research efforts, special programs and policies could then be developed to meet those difficulties, if indeed they exist.

Unemployment duration and discouragement. Once unemployed, middle-aged and older women remain jobless longer than other women. From 1973 to 1976, the proportion of older women unemployed for 15 or more weeks increased at a greater rate than for other age groups, but still slightly less than for older men. But, by 1976, for both older men and women, the long-term unemployed represented at least 42 percent of all older unemployed, in contrast to approximately 30 percent for all other age groups.

25/ Beverly J. McEddy, "Women Who Head Families", Monthly Labor Review, June 1976.

Because of their generally lower number of UI eligibility weeks, older women are also disproportionately among the UI exhaustees, and thus perhaps more likely to become "discouraged workers." In the older studies of workers subjected to plant shutdowns and mass layoffs, it was generally found that older women were much more likely than older men to cease job-seeking activities altogether, or to persist at a lower level than was the case for men. There have been few studies of such situations in the past five years or so, but one hypothesis would be that the extent of continued job-seeking among older displaced women would be greater than in earlier years. This hypothesis is based on the assumption that today's female labor force, including the older segment, has a greater attachment to the labor force than in the past.

The late entrant: Apart from the general issue of occupational sex-typing, which exacerbates the current and future job-related problems of middle-aged and older women, another source of such problems lies in the large number of middle-aged women who enter the labor force for the first time. The extent to which women enter the labor force at relatively young ages and remain employed, should, of course, tend to reduce this problem. This does not rule out, however, the strong possibility that late entry (or entry after an extended period of non-employment) will continue to warrant strong research and program attention. The fact that the general educational level of women has been improving constitutes: 1.) an ameliorative factor, in improving the job chances of such new entrants; and 2) a challenge, in that such better-educated women may face problems of under-employment--i.e., a failure to find jobs commensurate with their levels of education.

Since many middle-aged and older women entering or re-entering the labor force require special training because of their limited work experience, there may be a need to identify the types of deficiencies for which such special training could be designed. In recent years, Congress has been considering legislation (similar to that already existing in some States) which would provide special assistance to what has been called the "displaced homemaker" population. This assistance would consist of, among other things, special counseling training, and job development.

Social Security. Another job-related problem of women is that, in calculating retirement benefits, they are treated equally with men as far as "years of forgiveness" for interrupted work experience or low earnings years are concerned. Women's rights advocates point out that the maximum of five years' lowest earnings may have been reasonable in the case of men, but that the special labor force status of women results in many more years at such earnings levels.

As women become more permanently attached to the labor force, this problem will become somewhat attentuated, but it is not likely that the proportion of women with such regular labor force attachment will match that of men in the near or intermediate future. Here, too, is a topic for research attention.

Middle-aged and older women seeking to enter the labor force face not only the obstacles encountered by their male peers, such as stereotypes regarding the work performance of older persons, but also the "sexism" encountered by women in general. Other complaints registered by advocates of women's rights include the apparent penalty paid by married women as far as entitlement to retired worker social security benefits is concerned, a reflection of the "cultural lag" surviving from the time of the passage of the Social Security Act, when it was taken for granted that few married women would work for an extended number of years. On the other hand, even with an intermittent work career, a woman's benefits as a wife can be larger than if she had never worked at all, even though her earnings as a worker were subject to deductions for social security contributions.

As a research topic, this issue is important, if only to determine the degree to which such inequities discourage women from entering or remaining in the labor force.

Older minority women. The current occupational structure of middle-aged and older black women shows a much lower socio-economic profile than that of comparable white women. The critical research need here is to determine the degree and direction of absolute and relative change, as the current "new generation" of minority women, with their improved educational achievements and reduced fertility rates, move into their middle and older years.

We do know, for example, that much smaller proportions of young black women, compared to older ones, are in such low-status jobs as domestic service, and that their educational achievements are far superior to those of older black women--all of which suggests the possibility of an improved status in the future. But there is still a need to distinguish between improvements over a previous generation of women of the same race, and improvements relative to women of other races.

OLDER MINORITY GROUP WORKERS

There were nearly 2.6 million minority group members aged 62 and older in 1975, more than one million aged 55 to 59, and nearly 4 million aged 40 to 54. Comparable figures for blacks alone are 2.3 million, over 900,000, and 3.5 million, respectively.

By 1990, a little over ten years from now, these figures will rise to about:

Age	All Minorities	Blacks Only
62 years and over	3.7 million	3.2 million
55 to 59 years	1.3 million	1.1 million
40 to 54 years	5.5 million	4.5 million

The rate of increase for minorities is projected to be higher than that for whites of similar ages. Moreover, these projections assume no marked improvement in mortality rates, an assumption which can no longer be accepted as readily as in the past.

The increase of roughly 1 million blacks aged 40 to 54 between 1975 and 1990 will, by itself, present a special challenge to those seeking to resolve the employment problems of middle-aged workers. Preventive measures, unfortunately, have received a lower priority than measures designed to cure or alleviate the job-related problems of today's older persons, regardless of ethnicity. But for minority groups, the magnitude of future unemployment problems will depend in part on the success of current efforts aimed at critical segments of the "young middle-aged" in minority groups.

The projected increase in the numbers of older minority group workers may well exacerbate some of their special labor force problems, particularly their:

--generally higher levels of unemployment;
--more frequent labor force withdrawal;
--more involuntary part-time employment;
--more frequent health problems;
--"double jeopardy" encounters with combined
  ageism and racism.

As one example of "double jeopardy", white workers aged 55 to 64 experienced an increase in labor force participation in the 1975-76 recovery, but the opposite occurred among blacks and other minorities. Actually, the decrease in participation took place among black men, not women. The participation rate of 55 to 64 year-old minority males fell by three full percentage points from 1975 to 1976, in contrast to a 0.4 percentage point decline for black women of similar age, a decline of 1.1 point for white males, and only 0.1 point for white females. The reasons for such differentials still need exploration and warrant continued research.

Rates of unemployment are also critical, as table 4 reveals. From 1975 to 1976, otherwise a period of job "recovery," only the minority group members aged 55 to 64 experienced an increase in unemployment.

TABLE 4. ADULT UNEMPLOYMENT RATES BY RACE, SEX, AND AGE, 1970-76

Characteristics	1970	1971	1972	1973	1974	1975	1976
16 years and over							
White Men	4.0	4.9	4.5	3.7	4.3	7.2	6.4
White Women	5.4	6.3	5.9	5.3	6.1	8.6	7.9
Black & other Men	7.3	9.1	8.9	7.6	9.1	13.7	12.7
Black & other Women	9.3	10.8	11.3	10.5	10.7	14.0	13.6
25 to 34 years							
White Men	3.1	4.0	3.4	3.0	3.5	6.3	5.6
White Women	5.3	6.3	5.5	5.1	5.7	8.5	7.6
Black & other Men	6.1	7.4	6.8	5.8	7.2	11.9	11.0
Black & other Women	7.9	10.7	10.2	9.7	8.6	12.9	13.0
35 to 44 years							
White Men	2.3	2.9	2.5	1.8	2.4	4.5	3.7
White Women	4.3	4.9	4.5	3.7	4.3	6.6	5.8
Black & other Men	3.9	4.9	4.8	4.0	4.1	8.3	7.1
Black & other Women	4.8	6.9	7.2	5.3	6.7	8.6	8.1
45 to 54 years							
White Men	2.3	2.8	2.5	2.0	2.2	4.4	3.7
White Women	3.4	3.9	3.5	3.1	3.6	5.8	5.0
Black & other Men	3.3	4.5	3.8	3.2	4.0	9.0	7.2
Black & other Women	4.0	4.2	4.7	3.7	4.3	6.7	6.1
55 to 64 years							
White Men	2.7	3.2	3.0	2.4	2.5	4.1	4.0
White Women	2.6	3.3	3.3	2.8	3.3	5.1	4.8
Black & other Men	3.4	4.7	4.6	3.1	3.6	6.1	6.2
Black & other Women	3.2	3.5	4.0	3.2	3.3	5.3	5.5

SOURCE: Employment and Training Report of the President, 1977, Table A-20.

Job-related problems of older minority group workers may be accentuated by the possibility of their having more dependents than whites. For example, among the 53 to 57 year-old black males in the NLS sample, nearly 12 percent still had three or more children under 18 in 1966, in marked contrast to only 4.3 percent in the case of white males of the same ages. (The proportion may be even higher among Spanish-speaking and other minorities.)

Another crucial dimension of the double jeopardy status of older minority group workers can be seen in the fact that, even for the NLS sample of "healthy" middle aged-blacks aged 45 to 57 in 1966, unemployment in that year had a greater statistical relationship to withdrawal from the labor force seven years later than in the corresponding group of whites.

These findings point to the need to consider exogenous influences on the "decision to retire," as well as the need to account for a "lag" factor when the data suggest that a process is involved that cannot be captured through cross-sectional research. It should be noted that labor force withdrawal in this context refers to withdrawal before the age of 65. The older the unemployed individual, furthermore, the higher the early withdrawal rate, even for those aged only 45 to 47 years in 1966. Again, the relationship was more pronounced among black males than among white.

Health and employment status as of 1966, when added to the race variable, clearly shows the disadvantaged position of black males, as demonstrated by the early withdrawal rates shown below:

1966 Employment, Race and Health Status	Early Withdrawal Rate by 1973 [1/]
Employed Healthy Whites	19.1
Employed Healthy Blacks	22.5
Unemployed Healthy Whites	29.5
Employed Unhealthy Whites	33.9
Unemployed Healthy Blacks	37.5
Employed Unhealthy Blacks	39.2
Unemployed Unhealthy Whites	40.0
Unemployed Unhealthy Blacks	63.2

1/ Includes death before age 65.

The fact that the early withdrawal rate of employed healthy blacks is not much higher than that of comparable whites suggests the importance of both health and employment status in maintaining labor force attachment, regardless of race. (Relatively poor health status among older blacks, however, is sometimes offset by their greater economic need to remain in the labor force.)

Given the recent sharp improvements in the occupational gains of young blacks, it is important to plan longitudinal studies to determine not only whether such gains are sustained, but also to ascertain the extent to which such changes as a lowering of early withdrawal rates may occur among minority groups, relative to whites, and by sex. Continued data collection by the NLS will be a major contribution to this effort. In addition, a new sample survey of men aged 45 to 59, beginning no later than 1979 or 1980, would provide important information concerning "generational" differences, if any, in the labor force and life status of blacks relative to white middle-aged and older workers.

Part-Time vs. Full-Time. Nearly 16 percent of minority men and 39 percent of minority women aged 45 to 64 years in 1975 either worked full-time for less than 27 weeks, or at part-time jobs. Corresponding figures for whites were 10 percent for men and 36 percent for women. For both male and female minorities, the proportion working part-time only was greater than among whites. And, compared to those aged 25 to 44, the part-time proportion was greater for older persons, especially among minority women.

Unfortunately, these age groupings are rather broad for policymaking purposes, and information is lacking regarding the degree to which such part-year or part-time work experience is voluntary or involuntary. Furthermore, the percentages reported here are based only on those with any work experience at all.

Underemployment. Anecdotal literature is replete with case studies of black males who achieved higher education degrees in the late 1940's and the 1950's, but remained victims of race discrimination in the world of employment, thereby becoming "underemployed." No study of a systematic nature has been carried out to find out if recent progress in equal employment opportunities has produced any marked effect on their current employment status. Has their age now become a barrier to upward mobility? Have they become "locked in" (because of pension rights and other equities built up over time), and thus reluctant to seek upwardly-mobile opportunities? Has long-term experience with such underemployment produced an "adaptation" on their part, or resignation to the status quo? To what extent does the same phenomenon occur today among both men and women in minority groups, and with what implications for the future?

The NLS sample could be analyzed to seek answers to these and related questions. The 1974 report on the 1966-71 NLS data does not shed any direct light on them, but the material on voluntary job-changing during those five years (with no white-black comparisons) may provide some suggestions for further research.

Life-Expectancy Differences: One of the major issues concerning the minority aged arises from the lower life expectancy at birth of some minority groups. Some argue that special provisions should be made in the Social Security system to rectify this disadvantage, either in the form of still-lower retirement ages for such groups, and/or higher benefits for those persons retiring at the standard age.

Apart from the administrative and cost problems entailed in such proposals, there remains the issue of whether or not differences in life expectancy at 60 or 65 are as great as implied by those existing at birth. According to the National Center for Health Statistics, life expectancies at 50 and 65 as of 1975 for white and minority men and women were as follows:

	Expectancy in years	
	Whites	Blacks and others
Men		
Age 50	24.3	22.4
65	13.7	13.7
Women		
Age 50	30.3	27.9
65	18.1	17.5

Source: National Center for Health Statistics, Vital Statistics Report, vol. 28, no. 11 Supplement, February 1977, Table 2.

By age 65 the white-minority "gap" in life expectancy is non-existent among males, though it persists to some degree among women. But this does not pinpoint the specifics of life expectancy among workers or retirees, by race, sex, and age. As long as the industry-occupation mix is not "equal," such factors as mortality and health (as affected by the nature of the job, for example) and "retirement resources" (as affected by pension eligibility, number of dependents, etc.) may also continue to be unevenly distributed by race.

These and related issues raise the question of the degree to which EEO laws, regulations, and enforcement will move minority groups into industries and occupations which: 1) improve their pension coverage; 2) better their work experience and wage levels; 3) improve their health status as a function of the nature of the job, and thus their life expectancy.

Another dimension of inequality can be seen in the relative degree of pension coverage among blacks and whites in the NLS sample of 45 to 59 year-old males; in 1971, 72 percent of the whites, but only 59 percent of the blacks, were employed in establishments with pension programs. And in 1973, 70 percent of whites aged 62 to 64 were retired with a pension, compared to only 52 percent of blacks of the same age.

Additional aspects of the situation of older minority workers which merit further exploration include the following:

-- effects of business "outmigration" from central cities. The greater concentration of older persons in the central cities constitutes not only a serious problem for older minority jobseekers, but for urban governments as well. New trends, if any, in business migration patterns require special research attention.

-- changes in the industry-occupation distribution of middle-aged and older minority workers. The dynamics of change in the Nation's industry-occupation mix could serve both to improve and to damage the job situation of minority group members, especially the middle-aged. The effects of any such changes should be a major focus of empirical studies and projections.

-- the impact of union membership and union contract coverage. One study indicates that middle-aged black operatives who are not union members earn at least 25 percent less than comparable whites, while the differential between black and white union member operatives is much less (about 10 percent).[26] But this latter differential, itself, warrants special attention.

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[26] Herbert E. Parnes, et al., The Pre-Retirement Years (Columbus, Ohio: The Ohio State University), 1974.

On the other hand, the NLS data indicate that a higher proportion of middle-aged and older blacks than of whites are covered by collective bargaining contracts.27/ If this is so, and if these contracts provide for some form and degree of seniority rights, such coverage represents a valuable beachhead for these workers, not available to whites in general. However, among all unionized workers, whites may still have more accumulated seniority (including seniority restricted to more desirable jobs and departments).

How will unionized blacks fare, in the future, relative to other non-unionized blacks in the same occupation and in other occupations? What will be the trends vis a vis unionization and its presumed benefits among today's younger blacks (and other minorities, too) as they, themselves, become middle-aged or older?

-- relationship of work environment to health status. In what ways is health status among minority middle-aged workers affected by lower-wage employment and their relative concentration in industries and workplaces characterized by greater risks to safety and health? Are OSHA's activities having any effect on this phenomenon?

Other minority groups. The fact that this section devotes little space to minority groups other than blacks does not indicate an intention to place a lower priority on their job-related problems. Even for blacks, however, attention has been drawn only recently to the job-related problems of middle-aged and older workers. Unfortunately, national data of comparably detailed nature, by age, are lacking regarding other minority groups.

27/ Ibid.

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OLDER WORKERS IN RURAL AREAS

Most rural area labor forces are older than those in urban areas, largely as a result of the outmigration of younger persons seeking better job opportunities. Problems affecting older rural workers are partly the consequences of locally-restricted job opportunities, but may also reflect the more general economic characteristics of the region. For example, such economically-depressed areas as Appalachia present problems of a different order of complexity from those experienced in the Midwest wheat belt. In most instances, however, the dynamics of rural labor markets are such as to increase the odds that middle-aged and older workers will move into poverty status by the time they are 65 or older. This may be especially true in the case of the rural nonfarm population.

Job development, more than additional research, is the most urgent need of today's rural areas. Given relatively limited opportunities in many such areas for employment in the private sector for persons of all ages, greater emphasis should be placed on job development by rural public sector agencies, especially with regard to the older worker. Limited experience with Title IX programs in rural areas suggests that public sector opportunities might be expanded.

One effort, carried out in several counties, by the American Association of Retired Persons, developed jobs for persons 55 and older as school matrons, teacher aides, hospital and library aides, assistant school bus drivers, and even maintenance mechanics. Other examples include welfare agency case worker assistants and commodity distributors.

The benefits to the individuals employed, their families, and the agencies employing them should be obvious. But there are also community benefits that require consideration and perhaps evaluation. For example, as one result of employing elderly persons as pickup truck drivers to bring children to county health clinics, the number of clinic visits increased, presumably with positive effects on the health status of the children. In another example, the Food and Drug Administration improved its rural consumer education program by enlisting older persons as part-time employees.

On a more general policy level, serious consideration should be given to relatively permanent rural community service employment programs for older men and women. Public works programs for middle-aged and rural workers might also be given greater emphasis, to minimize the tendency to disregard that age group in favor of younger persons in hiring for public works efforts. It is also necessary to assess the impact of such programs on income, migration, and employment.

Contrary to stereotypes, older persons do migrate, especially if unemployed. In addition to the employment problems of older rural nonmigrants, therefore, the migration of older rural inhabitants to urban labor markets requires some attention. An integral part of a systematic effort to ease the problems of rural persons in general is the facilitation of adjustment to the urban labor market among those who choose to leave rural areas.28/

28/ Gene B. Peterson, L.M. Sharpe, and Thomas F. Drury, Southern Newcomers to Northern Cities (New York: Praeger Press) 1977.

RETIREMENT

It is impossible to overstate the importance of work-derived income and benefits in determining the standard of living of retirees. The increasingly-widespread availability of generous benefits has made it possible for many people to retire early in recent years, while others have been obliged to continue working well past the point when they should have left the labor force. Still others, as this section will show, leave work to enter poverty.

RETIREMENT INCOME AND POVERTY

The years since 1959 have witnessed a significant decrease in the degree of poverty among Americans 65 and older; over one-third of this group were at or below the poverty line in 1959 in contrast to 15 percent in 1976. In both years, however, the incidence of poverty was greater among elderly Americans than among those under 65, with the highest poverty rate occurring among aged individuals not living in families, most of whom are women.

Work experience clearly makes a difference as far as poverty among older Americans is concerned. Nearly 70 percent of all social security beneficiaries also had income from earnings in 1975, some because they had retired in the course of the year, but many others because they were employed part-time. Those lacking such work experience were far more likely to find themselves in poverty. For example, among men and women 60 and 61 years old in 1975, those with work experience had a poverty rate of 5 percent, compared with 7 percent for those retiring during the year and 28 percent for those who had retired earlier. The latter figure underlines the significant income penalty paid by many of those retiring before age 62.

PUBLIC AND PRIVATE PENSION SYSTEMS

The social security system now covers 90 percent of all U.S. workers and many of the remaining 10 percent are covered by government plans not integrated with social security. Today, about 17.6 million Americans, not including wives, husbands and survivors of eligible workers, are receiving retired worker benefits. An additional 2.1 million persons aged 65 and over are receiving supplemental security income (SSI), including 65 percent who receive regular social security benefits as well.

The Veterans Administration administers another sizable program for veterans with wartime service of 90 days or more, their surviving spouses, children, and dependent parents. Veterans 65 years and over receiving benefits through this program totaled about 526,000 in September 1977, with another 626,000 surviving spouses of similar age also receiving benefits.

Private pensions have also played a role in reducing poverty among older Americans. About 45 percent of all private sector employees are covered by such plans, most of them in large enterprise industries or in the higher-paying unionized occupations. Well over 6 million Americans are now receiving benefits from private plans, in contrast to less than half a million in 1950.

The rise in the number of persons with private pension coverage should be accelerated by the Employment Retirement Income Security Act of 1974 (ERISA), because of its provision regarding "vesting" of pension rights and insurance of benefits through the Pension Benefit Guaranty Corporation. Vesting guarantees that, after a certain minimum number of years in a private pension plan, a worker acquires an absolute right to all or a portion of accrued benefits, even if he or she leaves an employer before retirement age. Insurance guarantees payment of benefits in the event of a plan's termination, through a plant shutdown or for other reasons.

In addition, many public and private plans now include cost-of-living provisions which offer the retired person a further hedge against poverty. The use of such provisions, which are widely based on the Consumer Price Index (CPI), has stimulated interest in the development of a separate price index for retired persons, which would reflect the actual buying and spending patterns of older Americans, rather than the patterns of the entire population.

THE SOCIAL SECURITY EARNINGS TEST

The status of being "no longer employed" or "retired" is measured administratively by the amount of earnings received by persons eligible on the grounds of age for social security benefits. An individual under age 72 earning more than a certain amount (now about $4,000)[29/] is no longer defined as totally retired and benefits equivalent to 50 percent of earned income above that amount are withheld. This earnings test has become controversial for a number of reasons. One criticism is that it tends to discriminate against those persons 62 to 71 years of age who have little or no pension or other unearned income. Other objections include the assertion that the earnings test is a disincentive to work, and is therefore counter-productive for the economy.

On the other hand, elimination of such a test would mean that some other way of determining retirement status would have to be established, perhaps a "means test" (which is both costly to administer and of questionable social value) or a system of public pensions for all persons reaching a given age, regardless of employment status (The experience of other countries indicates that such a system would lead to substantially lower payments).

As an alternative to abolishing the test, some would favor raising the dollar ceiling beyond which earnings are penalized. Past liberalizations of the maximum have, in fact, been followed by increases in the proportion of "retired" persons with higher levels of earned income. The issue will doubtless continue to be a live one, especially among retired professionals and those whose skills are in particular demand.

[29/] This amount is raised automatically whenever there is an increase in social security benefits following a cost-of-living adjustment. In 1979, the amount will rise to $4,500.

The possibility that the earnings test operates as a work disincentive raises a number of critical research issues:

1.) What is the evidence for the proposition that many people do retire because of the earnings test?

2.) If some persons do retire for this reason, what are the actual numbers involved? What are the demographic and occupational industrial characteristics of such retirees?

3.) What is the actual production loss incurred as a result of such withholding of labor?

4.) Is this loss equal to, below, or above the "extra" cost to the social security system of eliminating the earnings test, and by how much?

5.) If it could be demonstrated that the production loss is more costly than a change in the earnings test, how could the social security system be appropriately redesigned?

The controversy over the retirement or earnings test applied by Social Security will continue for some time, and it is possible that certain compromises or exceptions might be accepted in the years ahead. Occupations in the health services offer a case in point. In small or rural communities, for example, private duty or practical nurses may be in short supply but great demand: if the earnings test were liberalized in some form short of providing full benefits to persons employed full-time, such nurses might increase their availability.

JOB OPPORTUNITIES AND SSA

One issue-laden proposition is that social security eligibility and the earnings test together function as major disincentives to remain in the labor force, and that "improved" benefits coupled with private pension improvements may accentuate this trend in future years. More recently, an analysis by Burkhauser and Turner has pointed to another, but generally unrecognized, function of the social security incentive to retire. It may also affect workers in the "prime ages" by raising their hours of work per week above what they would otherwise be.

According to Burkhauser and Turner, therefore, social security provisions may cause not only a misallocation of resources through the non-use of older workers, but also a larger than "optimal" labor supply among younger workers.[30]

RETIREMENT INTENTIONS AND EARLY RETIREMENT

The conventional wisdom gleaned from the literature on retirement intentions indicates that the preference for early retirement declines as persons move closer to a given age of retirement.[31] Although much of the evidence pointing in this direction is derived from cross-sectional research studies, the NLS study also indicates that over a five-year span (from 1966 to 1971) employed men 45 to 55 years old in 1966 registered a decline in proportions intending to retire before 65. And actual retirement by 1973 was much below the 1971 level of intentions.[32]

More frequently than not, early retirement is viewed in a positive light, from the standpoint of both the individual worker and the firm. For the worker, retiring before some "normal" age may be viewed favorably because of: 1.) a desire to leave a dissatisfying job, especially after many years of working in such a position; 2) a desire to have greater leisure time; 3.) an illness or disability which may be aggravated by continued employment; and 4.) a calculation that early retirement income may approximate take-home earnings.

For the firm, early retirement practices may be deemed a cost-saving device, especially if continued service means increased wages or reduced productivity, and a means of retaining valuable younger employees who might otherwise leave the firm.

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[30] Richard V. Burkhauser and John A. Turner, "A Time Series Analysis of Social Security and its Effects on The Market Work of Prime-Age Men." Unpublished draft manuscript, May 1977.

[31] Richard Barfield and James Morgan, Early Retirement: The Decision and The Experience (Ann Arbor: Institute for Social Research, The University of Michigan) 1966; Louis Harris, Survey Report, Louis Harris and Associates, 1965.

[32] Herbert S. Parnes, *et al.*, *op. cit.*

After a number of years, however, the individual early retiree may find that income has deteriorated in its purchasing power or that, even with little purchasing power loss, he or she is unable to keep up with the rising standard of living experienced by the working population. For the firm, early retirement practices may turn out to be more expensive than anticipated, if total pension outlays are greater than expected. This can happen as a result of either cost-of-living pension increases or greater worker longevity than was actuarially projected. A third cost element may also enter the picture, to the degree that valuable skilled workers may respond to an early retirement incentive.

In addition, there is some evidence that early retirement is not viewed as strictly positive by the individual. The Social Security study of men stopping work before age 65 found that 55 percent of those 62-to-64 years old would have worked longer if they could. Among the previously self-employed, 38 percent of those responding said their business had not been doing well enough to keep on. Among all retirees aged 62 to 64, 13 percent reported that their last jobs had been discontinued or that they had been laid off, a higher proportion than among those retiring at age 65 or later. More significantly, 60 percent of the 62 to 64 year old male retirees and more than two-thirds of the women of similar age who were awarded reduced benefits in 1968 were not employed at the time of the award.[33]

As another measure of the potentially negative impact of early retirement, the data from the Social Security study indicate that "Men claiming reduced benefits (i.e., before 65) are...less likely than those who claim full benefits to supplement their social security payments with private pension income."[34] Thus the impact of pre-retirement unemployment experience must be included in any policy or research considerations of early retirement.

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[33] Virginia P. Reno, "Incidence of Compulsory Retirement Policies," in Reaching Retirement Age (Baltimore: Social Security Administration) 1976.

[34] Ibid.

Conventional wisdom on the subject of retirement assumes that most working couples retire at age 65 and possibly receive benefits higher than earnings. However, Social Security data from several sources indicate that most couples actually retire before that age, and are thereby subject to substantial and permanent reductions in Social Security benefits (5/9ths of one percent for each month prior to age 65). Persons retiring at age 62 experience a 20 percent reduction in benefits. And since the benefit formula is based on earnings before retirement, the frequent result for the early-retiring couple is that benefits are actually less than the 150 percent of the husband's "Primary Insurance Amount."

There is another perspective to consider, namely, the total social costs, or the costs to the community and/or economy. To quote Bixby,

> Early retirement has some cost to the society, in spite of the actuarial reduction....It is costly to the extent that the national product is reduced by premature retirement and that earnings foregone necessarily result in smaller revenues to the social security system.35/

Early retirement practices, especially if encouraged by the employer and/or the union, may also affect the age of hiring. That is, the earlier the age of retirement in an organization, the lower the age at which employers may want to hire older applicants. This is a proposition that has not actually been researched, and it obviously touches on critical policy issues, including discrimination.

Lowering the retirement age, furthermore, has the effect of shifting more of the cost of unemployment onto the older population (when early retirement is justified as a means of "solving unemployment).36/ Since it may also result in levels of income for the retired which are

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35/ Lenore E. Bixby, "Retirement Patterns in the United States: Research and Policy Interaction," Social Security Bulletin, August 1976.

36/ Kreps, op. cit.

seldom equal to foregone earnings, part of the costs are borne by the retirees themselves. This dimension of the early retirement phenomenon is simultaneously an example of the impact on the individual retiree and of the impact on the total economy in terms of the retirees' reduced purchasing power and increased reliance on social transfer payments. From a public policy point of view, therefore, there is a need to determine if there is a limit to which the economy can tolerate a continuing decline in average age at retirement.

Measures of public acceptance of early retirement remain at a somewhat primitive level. The Harris survey of 1974 found that 47 percent of those aged 18 to 64 agreed that "younger required retirement is a good thing," while 39 percent disagreed and 14 percent were not sure. By contrast, only one-third of those over 65 agreed and 47 percent disagreed, with 20 percent unsure. Since there are no trend data on this critical issue, it may be important to initiate additional research on this topic on an intermittent basis, with due regard for such variables as type of worker, industry, level of decision-making, etc.

Health status is perhaps the most frequently-mentioned factor in much of the research on retirement. Besides the typical cross-sectional study of retirees versus non-retirees which finds that the former have a higher proportion of persons reporting illness or work incapacity as a reason for retirement (early or "regular"), the more interesting and perhaps more convincing analyses are derived from longitudinal studies, especially the NLS study of men 45 to 59 years old in 1966. Sheppard found that for the total sample, regardless of age, health status as of 1966 was a powerful predictor of early withdrawal by 1973.[37]

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[37] Sheppard, op. cit.

Other factors which may influence the retirement decision include the following:

1.) the number of dependents, both during the pre-retirement years and at the time of retirement;

2.) number of parents and parents-in-law alive during pre-retirement years and at the time of retirement;

3.) unemployment levels in the local labor market area;

4.) size of the labor market area population;

5.) time or age of entry into the labor force; and

6.) the nature and quality of job tasks; job satisfaction.[38]

More recently, the literature on the topic of early retirement, (and on retirement in general) has stressed the growing importance of financial "incentives" to retire, including the level of retirement benefits, retirement income as a ratio of previous earnings (the "replacement ratio"), and expected retirement income in absolute terms, as well as in terms of the pension/earnings ratio.[39] Some researchers assert that the financial incentive has overcome, in recent years, the importance of health status.[40]

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[38] Dan Jacobsohn, "Willingness to Retire in Relation to Job Strain and Type of Work," Industrial Gerontology, Spring 1972; Ross Stagner, "Boredom on The Assembly Line: Age and Personality Variables," Industrial Gerontology, Winter 1975; Harold L. Sheppard, op. cit.; Harold L. Sheppard, "Job Tasks and Workers' Lives," in Sheppard and Herrick (eds.), Where Have All the Robots Gone? (New York, Free Press-MacMillan) 1972; A.W. Pollman and A.C. Johnson, "Resistance to Change, Early Retirement and Managerial Decisions." Industrial Gerontology, Winter, 1974.

[39] Lowell E. Gallaway, The Retirement Decision, Social Security Administration, Research and Statistics Report No. 9, 1965; Paul Fisher, "Labor Force Participation of The Aged and The Social Security System in Nine Countries," Industrial Gerontology, Winter 1975; Garfinkel and Masters, 1974; Richard Barfield and James Morgan, op. cit.

[40] See, for example Michael Buskin, "Social Security and Retirement Decisions," National Bureau of Economic Research, Working Paper No. 107, 1975.

Continuing study is needed of the number of private and public pensions providing for early retirement, including the numbers of workers affected. Such efforts should focus especially on the degree to which such benefits are available on an actuarially-reduced basis.

The Bankers Trust study of 1970-75 plans found that only 10 percent reduced benefits on the basis of life-expectancy, compared to 48 percent revealed in the Trust's study of 1965-70 data. 41/ While much public attention is focused on such public plans as the Social Security system and its "solvency," much less is being paid to the solvency (or increased costs) of private plans providing high benefits without consideration to life expectancy.

However, the Bankers Trust studies provide no information on either the numbers of workers so covered or actual early retirement rates. But given the general finding that early retirement rates are partly (or even largely) a function of pension/earnings ratio, it may be assumed that early retirement rates increase under such conditions.

In any event, greater knowledge is required concerning the number of private and public plans, including the numbers of workers covered and actually retiring: 1.) on an early-age basis; 2.) on an actuarially-reduced basis; 3.) at what pension. We also need to know more concerning the total costs of such patterns to companies, including the "trade-offs" for the currently-employed workers in each establishment and agency.

Type of industry is one of the factors involved in early retirement. The 1968 Retirement History Study of Social Security found that 40 percent of the sample aged 58 to 63 (excluding married women) in manufacturing were eligible for retirement as early as age 62, compared to only 27 percent for the total sample. State and local

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41/ Bankers Trust Company, 1975 Study of Corporate Pension Plans (New York) 1975.

governments may reveal another very high proportion. The NLS data show that, regardless of age, white and black males employed in manufacturing as of 1966 and who were healthy in that year, had an above-average early retirement rate as of 1973. [42]

If manufacturing retains a high proportion of early-retirement "eligibles" while continuing its decline as a source of employment, will that mean a decrease in the proportion of all employees retiring before the age of 65? If, on the other hand, State and local government employment continues to rise, does that mean a future increase in the proportion of early retirees?

In this connection, the rate of retirement before the age of 65 in the NLS sample of men is higher in public administration (the bulk of whose employees are in State and local governments) than for the rest of the sample. Equally important, the health status of such men was apparently superior to that of the rest of the NLS sample.

Change in the industrial structure over future years is only one of the factors which may create new retirement patterns. For example, inflation is another variable that may take on increased importance in the years ahead. Walker is among the management and pension analysts suggesting that this factor may be among the forces serving as a brake on the early retirement trend. [43]

Little is known regarding the current impact of inflation on both retirement intentions of workers now approaching retirement ages and on the thrust, if any, among already-retired workers toward some type of return to the labor force. This last phenomenon should be accorded greater research and policy attention in the near future.

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[42] Herbert S. Parnes, et al., op. cit.

[43] James W. Walker and Karl F. Price, "Retirement Policy Formulation: A Systems Perspective," in Personnel Review, Winter 1976.

DELAYED RETIREMENT AND REEMPLOYMENT

Under certain circumstances (severe labor shortages, for example), bonuses may be given to workers who postpone retirement beyond the normal age. Norway, to cite one instance, provides somewhat liberal bonuses to workers who postpone their retirement beyond the usual age (67) in the form of a 9 percent increment in benefits per year of deferred retirement. In the United States, the benefit is only 1 percent per year, hardly an effective incentive (assuming workers are aware of the provision, to begin witn).

There are several issues involved in delayed retirement, one of them related to the argument that improved benefits for those at lower earnings levels should have a higher priority than greater incentives leading to continued participation among the "better-off" older persons. A critical factor in future debates on the issue might be the degree to which the "dependency burden" becomes serious enough to warrant a search for changes in existing public and private retirement income provisions.

Another issue that may grow in research and policy importance is the "return to work" pattern, which could become more pronounced among certain categories of retired men and women, especially if inflation and the costs of current retirement policies become more critical elements in our economic future. Although most of today's retirees remain out of the labor force, it is significant that, over a recent three-year period, 8 percent shifted back to work at earnings levels high enough to disqualify them for social security. [44/] Studies of trends, if any, in this regard are lacking. Nor is much information available concerning the process of making a return-to-work decision.

[44/] S. Grad, "New Retirees and the Stability of the Retirement Decision," Social Security Bulletin, March 1977.

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A new source of data on this topic is the Social Security Administration's Retirement History Study. SSA itself is presently engaged in developing an "index of availability" of retirees for continued work, based on work attitudes, perceived income adequacy, and self-reported physical capacity. Additional research should focus on part-time vs. full-time resumption of work. Better information is also needed to determine whether the willingness to return to work varies by previous occupation and industry. The 1974 Harris survey found that roughly one-third of the 65-plus retired would like to be working again, but no further details were provided (although the data could be analyzed for that purpose). More than twenty years ago, however, a study of a national sample of Social Security beneficiaries found that 15 percent of retirees formerly in professional and technical positions were in good health and interested in working. Eleven percent of those previously in service occupations and the same proportion of managers felt the same way.

Simultaneously with the current thrust toward earlier retirement, another, less obtrusive factor may have entered the picture -- what the French call *le travail noir*, or clandestine or unreported work by retirees. To some economists and policymakers, this pattern provides one more explanation for high levels of unemployment in other segments of the population. At the very least, clandestine work raises some questions about the possible indirect and unanticipated effects of any further lowering of the retirement age.

THE FUTURE OF RETIREMENT AGE POLICY

According to some observers, the issue of retirement age policy may reach a critical point before the end of this century. Their assumption rests on a number of factors and developments, including trends in labor force participation and work experience, the precarious situation attributed to public, and some private, pension funds, the current concern about Social Security financing, unexpected changes in the life expectancy of men and women after given ages of retirement, and the greater relative costs of supporting older versus younger nonworkers. [45]

Retirement rates by skill-level may also be of considerable significance, if workers in occupations critical to the productive capacity of the economy withdraw from the labor force in large numbers. [46] While statistical data on this subject are in rich supply, little analysis has been carried out from the point of view of economy-wide needs.

The question of retirement age policy presents abundant opportunities for research. More specifically, attention could be focused on:

- empirical data regarding Federal (including military) retirement policies.
- State and local pension funding problems.
- changes and trends, if any, in private organizational and public opinion regarding the "dependency burden" and the "right" age for retirement.
- monitoring the use of "functional" criteria (instead of chronological age) in retirement decisions by employers and unions.
- improvements in measures of relative costs of supporting the "young" vs. the "old," and the degree to which declining fertility may actually increase the latter type of costs. Research should also deal with the changing age composition of the older population, since the "very old" (those 80 and over) will be increasing in numbers at a far greater rate than those 60 to 79 before the end of this century.

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[45] Harold L. Sheppard and Sara E. Rix, The Graying of Working America: The Coming Crisis of Retirement Age Policy. (New York: Free Press-MacMillan) 1977.

[46] Otto Eckstein, "Economic Growth, Employment and Manpower Policy," in Juanita Kreps (ed.), Technology, Manpower and Retirement Policy (New York: World Publishing Company) 1966.

- -- the impact of rising expectations regarding income adequacy among middle-aged and older workers in the near and long-run, including the possibility that such expectations may make continued employment preferable to Social Security and private pension benefits.

- -- the degree to which energy and natural resource problems may lead to more labor-intensive production in the future.

- -- the ability of the working population and the general economy to support a nonworking population of given sizes, at possibly rising costs.

- -- the health status of the older population, since health is a critical determinant of early retirement.

Finally, while the need for moving the retirement age upward is more widely recognized and accepted by key private and public decisionmakers as well as by the public, a host of implementational problems remain, including:

- -- specific "first steps" to be taken (e.g., rewards for deferring retirement beyond 65, or increasing the incentive for postponing retirement beyond 62);

- -- wider use of work-sharing;

- -- variations in the optimum retirement age, according to the nature of the work in specific industries and occupations.

"Continuous increase in the relative number of older persons, together with decline in work-life expectancy," argues Spengler, "could contribute to financial problems in a country in which payments to retired persons from such programs as Social Security rest essentially on a pay-as-you-go basis."47/ Early retirement, as he and others have pointed out, will be especially burdensome in a stationary population. According to Kreps, "Removing

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47/ Joseph J. Spengler, in Economics of a Stationary Population (Washington, D.C.: The National Science Foundation), 1975.

those aged 55 to 66 from jobs would reduce the ratio of workers to retirees by 20 percent and increase the number of older dependents by 46 percent." [48]

To repeat, one of the overriding priority issues that will have to be confronted and dealt with in the near and intermediate future has to do with the degree to which the economy can accommodate lowered rates of labor force participation among those 45 and older. This issue must not be confused with one that is more psychological in nature, i.e., the question of the degree to which retirement is a truly voluntary act. Much of what is called voluntary retirement is influenced, in reality, by poor employment prospects, poor health, or pressure to retire from younger workers and management.

48/ Juanita Kreps, op. cit.

HEALTH, SAFETY, AND THE OLDER WORKER

Since retirement at any age is partly a function of the health status of the individual worker, it is critical to determine the degree to which the job itself, general working conditions or environment, and unemployment experience contribute to health problems, both critical and chronic. The literature on retirement typically assumes, however, that health status is independent of the individual's employment role and experience. At best, the focus is on the effects of health problems on the labor force experiences of middle-aged and older workers.

Both white and black males in the NLS samples of 1966 who reported health conditions affecting the kinds of work they could do were much more likely, seven years later, to be dead or in retirement than those without such work-limiting conditions. But the proportions with work-limiting conditions varied by industry and occupation. 49/

49/ The use of large occupational classifications leads to research findings that obscure the impact of occupation on mortality and health status. If there is to be any serious effort to eliminate job-related health problems of middle-aged and older workers, more detailed breakdowns by occupation will be necessary. Also, if deaths are omitted from the analysis of early withdrawal rates by health status, we get a smaller difference in early withdrawal rates between the healthy and unhealthy workers, thus minimizing the impact of the health factor. The failure to include mortality data may be an important criticism of those studies that tend to underestimate the relative importance of health in the labor force withdrawal phenomenon.

SAFETY AND HEALTH ON THE JOB[50]

One of the problems faced by older workers is the matter of occupational safety and health. Many physiological and psychological changes do occur as an individual ages. Identifying the specific areas of change and assessing their consequences for an individual's work activity has been the subject of a large volume of research.

For example, changes in sensory capacity, particularly declines in visual functions and problems with audition or speech intelligibility, have been cited numerous times as age-related. Corso, upon reviewing the literature, concluded that visual acuity is relatively poor in small children, improves in young adulthood, then declines from the mid-twenties to the fifties. McFarland and Fisher found a constant decline with increasing age in the ability to see at low levels of illumination.[51]

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[50] A 1974 publication by the National Institute for Occupational Safety and Health (NIOSH) offers an excellent review of the role of age in job safety and health which provided much of the material for this section. Equally valuable are the research analyses and experiments by: Warner K. Schaie, "Development Processes and Aging," in C. Eisdorfer and M. Powell Lawton (eds.), *The Psychology of Adult Performance and Aging*, American Psychological Association, 1973; and Paul B. Baltes and Gisela V. Labouvie, "Adult Development of Intellectual Performance," in Eisdorfer and Lawton, *op. cit.*

[51] J. F. Corso, "The Sensory Effects of Aging in Man," Scienta, 1968; R.A. McFarland, R.A., and B.M. O'Dougherty, "Work and Occupational Skills," in J.E. Birren (ed.) *Handbook of Aging and The Individual: Psychological and Biological Aspects*, University of Chicago, 1959; Paul Fisher, "Labor Force Participation of the Aged and the Social Security System in Nine Countries," *Industrial Gerontology*, Winter 1975.

Accommodation, or the ability to focus on objects at varying distances, is cited by Birren as age-related, with a more fixed focus in the older person and a lessened ability to adjust to objects close to the eye. Regarding color differentiation, Gilbert and Braun note a decreasing ability to discriminate between green and blue as age increases. 52/

Corso found that low-frequency hearing loss is minimal up to 50 years of age. Sensitivity then decreases as age increases, with greater decrements at higher-test frequencies. Related to hearing loss is speech intelligibility; as hearing loss increases, difficulty arises in discriminating between consonants with such high frequency components as s, z, t, f, and g. 53/

Impairment of motor skills has been the subject of many studies, most of which show a decline with age. A statistically-significant correlation between mean reaction time and age was found by Cation, Mount and Brenner. Welford cites a slowing of sensorimotor performance with age; in a review of psychomotor performance, he maintains there is little change of speed or accuracy among older persons on simple tests of classical reaction time, but age-related changes do appear when a continuous series of movements are performed. Also, greater changes with age are found when complications are introduced which require the subject to relate what is perceived to what is done. 54/ What is missing from most of these studies is the distribution of reaction time by age, and the degree to which these distributions overlap among different age groups.

52/ J.E. Birren, The Psychology of Aging (Englewood Cliffs, N.J.: Prentice-Hall) 1964; G. Gilbert, "Age Changes in Color Matching," Journal of Gerontology, 1957; H.W. Braun, "Perceptual Processes," in James E. Birren (ed.), *op. cit.*

53/ Corso, *op. cit.*

54/ W.L. Cation, G.E. Mount, and R. Brenner, "Variability of Reaction Time and Susceptibility to Automobile Accidents," Journal of Applied Psychology, 1951; A.T. Welford, "On Changes of Performance with Age," in Lancet, 1962.

Increasing interest in the aging process and related behavioral changes has led to a large amount of documentation concerning the functional implications of aging for work and work-related activities. This information has been of special interest in the field of occupational safety and health, because of the frequent use of age as a factor in hiring, promoting, and terminating employees. While it is safe to say that certain physiological capacities do decrease as an individual ages, it is not safe to assume that these changes affect all physical capacities in the same manner, or that they cannot be overcome by wearing eyeglasses, increasing illumination, working more slowly, working more accurately, and through self-selection out of dangerous or unhealthy situations. (This may help to explain the finding by Sheppard that voluntary job changing is highest among the "unhealthy" older males in the NLS sample.)55/

While a number of studies attempt to relate age to accident rates, very few are of use in identifying the relationship between the two, because of the manner in which data from various accident studies are reported. Often, only the frequency of accidents per age groups is revealed, omitting the relative numbers of workers in each age group. At other times, the rate of accidents for a given number of workers is reported for an age group, but the nature of the accidents is not indicated, implying homogeneity among the tasks studied.

However, Bedford has concluded that the incidence of different types of accidents changes in different directions with age. For example, accidents involving falls and being hit by falling objects increase with age, while injuries from getting caught in or starting a machine decrease with age. Government statistics support this claim, showing a rise in injuries resulting from falls as age increases in the general population.56/

55/ Sheppard, op. cit.

56/ Sleight, R.B., and K. G. Cook, Problems in Occupational Safety and Health (Washington: Public Health Service, National Institute for Occupational Safety and Health), 1974.

There are indications that accidents preventable by judgment based on experience diminish with age, in contrast to those accidents requiring a quick evasive response to sudden dangers. Zeller and Mosely concluded from a study of air force pilots that experience was the most important factor in predicting accidents, attributing a decrease in accidents to an increase in experience. Van Zelst found that, even when present job experience was short, older employees maintained better safety records during an 18-month period, suggesting a possible skill/experience transfer from previous jobs in the case of older workers.57/

A word of caution is necessary in interpreting these findings, since those workers who have accidents or are unable to cope with the demands of a certain occupation have a tendency to self-select themselves out of the job, leaving only the workers who know they can perform efficiently and hence are less likely to have accidents.

57/ Zeller and Mosely; Van Zelst; cited in Sleight and Cook, op. cit.

JOB PERFORMANCE, LEARNING, AND TRAINING

It is generally believed that increasing age inhibits an individual's general capacity to work. This may be true for physically demanding jobs, but in situations where great physical effort is not required, it has been found that overall work capacity is not greatly affected by age. Snook studied continuous work capacity in two age groups and concluded that such capacity does not decrease as age increases in moderately demanding environments. Continuous work capacity of the 25-to-35 age group was the same as that of the 45-to-60 group.[58/]

Regarding learning and training, Birren suggests that, under most circumstances, there is little change in primary learning ability as age increases. When differences between age groups do appear, they are usually the result of differences in perception, set, attention, motivation, and physiological state, rather than learning capacity. Trites and Cobb studied test abilities of air traffic controllers and found that older subjects had lower scores on tests of immediate memory and non-verbal abstract reasoning, but higher scores on tests of arithmetic and verbal ability. On imed tests, the subject matter (arithmetic, verbal, etc.) seemed to determine whether the older or younger group scored higher. Overall, the older members of the sample were viewed as more intellectually efficient, responsible, and tolerant.[59/] (We discuss other aspects of this topic in the section on education and training.)

[58/] Snook, cited in Sleight and Cook, op. cit.

[59/] Birren, op. cit.; D.K. Trites and B.B. Cobb, Jr., Problems in Air Traffic Management: Implications of Afe for Training and Job Performance of Air Traffic Controllers (Oklahoma City: Civil Aeromedical Research Institute), 1962.

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ILLNESSES

Individual differences in health and hygiene habits, as well as differences in physical fitness, contribute to the difficulty in determining the effects of age alone on incidence of illness. For example, Simons and Mirabile surveyed over 20,000 workers and found that younger workers had the greatest number of back injuries. (This phenomenon may also reflect the relatively more dangerous jobs held by younger workers.)60/

A rising incidence of disorder in respiratory system functions is seen with increasing age. However, workers with such problems (miners, for example) are often exposed to specific risk-causing agents during their normal work activity. For the most part, increased age meant longer time on the job and more exposure to the harmful elements.

These findings suggest the need, not only to improve the work environments of workers of all ages, but also to consider the feasibility of job transfers from high-risk environments after a certain age.

In summary, it should be noted that attempts to translate much of this research into action involves some major problems. For example:

- -- various capabilities (but not all, and not all at the same age) decline with advancing years, but efforts to correlate these declines with accidents have not always been successful;
- -- there has not been enough appreciation of the substantial differences among individuals of the same age with respect to measured capability;
- -- similarly, compensations made by the worker to maintain a given level of work performance have been insufficiently recognized.

60/ G.R. Simons and M.D. Mirabile, "An Analysis and Interpretation of Industrial Medical Data, With Concentration on Black Problems," Journal of Occupational Medicine, 1972.

The "survivorship" phenomenon is also involved: victims of serious or fatal work-related accidents are, by definition, not included in samples of older workers. This raises the question of the impact of voluntary job-changing on accident rates, and also the question of the degree to which older workers remaining in a given occupation are those who were able to survive unscathed.

Other relevant generalizations and principles include the following:

- -- workers aged about 25 to 55 tend to have fewer accidents than might be expected by chance;
- -- job tasks requiring judgment and expectation of hazardous circumstances place the older worker at an advantage over the younger worker;
- -- rigidly-structured tasks and those with rigidly-determined performance pace are less likely to allow older workers to find or develop compensatory mechanisms, in which case the effects of "aging" can be serious;
- -- at best, chronological age should be used as no more than an indicator that specific functional capabilities should be monitored.

WORK PERFORMANCE

Government-sponsored research on age and job performance has not been of a sustained or systematic nature, but its overall results show no consistent pattern of superior productivity in any age group. Intra-age group variations are greater than those between age groups, a point which is frequently obscured in important decision-making situations affecting the job status of middle-aged and older workers.

Most productivity studies show either a slight positive relationship with age or none at all. Three examples illustrate this point: (1) a review of records of 6,000 clerical workers showed that many older workers performed better than younger workers, had a steadier rate of output, and were as accurate as younger workers; (2) according to supervisory ratings of over 3,000 persons aged 60 or more in 81 organizations, most were as good as or better than younger workers regarding work quality, work volume, absenteeism, and dependability; (3) a survey of over 132,000 workers in New York State agencies where the mandatory retirement age is 70 shows that workers over 65 are "about equal to" or "sometimes noticeably better" than others in job performance. According to Kaufman, differences in performance and capacity are less a function of age than intelligence, interests, needs, and career goals. Furthermore, any deterioration in performance capability of older workers can be somewhat offset by other characteristics, such as experience and judgment. 61/

AGING AND FUNCTIONAL CHANGES

Another body of relevant research is centered on behavioral changes that occur through the aging process.

61/ R.A. McFarland and B.M. O'Dougherty, op. cit.; C.H. Kelleher and D.A. Quirk, "Age, Functional Capacity and Work: An Annotated Bibliography," Industrial Gerontology, Fall 1973; R.L. Peterson, 3,000 Older Workers and Their Job Effectiveness, Business Management Aid 15, Bureau of Business Management, College of Commerce and Business Administration (Urbana: University of Illinois) undated; NCOA Older Worker Specialist Newsletter, 11/12, 1972; H.G. Kaufman. Obsolescence and Professional Career Development (New York; AMACOM) 1974.

In particular, this research has been used in the field of occupational safety and health, reported earlier in this document.

In summary, the available information suggests that older workers are able to do many different kinds of work, and perform rather well when physical tasks are required. Using the functional, 7-category physical capacity technique called GULHEMP, a 1973 study by the National Council on Aging (NCOA) showed that most prospective employees seek jobs they are physically able to perform, and that middle-aged and older workers can perform jobs for which they would have been rejected because of age. The significance of this finding lies in the fact that most of the workers involved had been unemployed.[62/]

One of the limitations in much of the research on work performance of older employees is that it frequently involves the survivors only. A 1977 study not subject to this criticism was based on a comparison of company records of workers recently retired at about age 65 with a control group "whose respective years of company service matched those of a member of the retired group." (However the still-employed, long-service control group was, on the average, 20 years younger than the retired group.)

Attendance records showed a better score for the older workers, based on a number of measures (times absent; percent with perfect attendance, duration, etc.). The retirees' records also revealed fewer visits to the medical department (for non-accident-related illnesses) over the five-year period studied. A similar pattern was observed regarding job-related injuries.

In summary, the study reported clear evidence

> " . . . that older workers have a better attendance, health, and injury record than younger workers. By more persistently staying on the job, they can help

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[62/] D.A. Quirk and S.H. Skinner," IHCS: Physical Capacity, Age and Employment," Industrial Gerontology, Writer, 1975.

> reduce management problems for all kinds of absenteeism . . . Why, then, retire a person who has been a good employee, if transfer or job redesign are reasonable alternatives? While it may be difficult to set up criteria other than age for determining retirement policies, it is not impossible.63/

In evaluating the policy implications of such findings, care should be taken to distinguish between the value of retaining versus hiring older workers. The conclusions cited above, and those of other researchers with similar findings, may bear more directly on the retention issue than on hiring. In order to complete the picture, research is needed which would contrast newly-employed older workers and newly-employed younger ones.

Schwab and Heneman did include organizational experience as a factor in a study of the relationship between age and work productivity among semi-skilled operatives. By controlling for experience, they found that older workers were as productive as younger ones, implying that older workers might be able to offset productivity declines occurring as a function of age by capitalizing on improved skills and knowledge associated with experience.64/

It is possible that less-productive older workers may leave the organization through self-selection and/or organizational decision; thus, the remaining older workers may be the ones whose productivity over time was so high that it is still acceptable, even after aging. If this had been the case, however, the Schwab-Heneman study would not have found variability in older workers' productivity compared to that of younger ones. An examination of standard deviations

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63/ Douglas L. Bartley, "Compulsory Retirement: A Reevaluation," Personnel, March-April 1977.

64/ D.P. Schwab and H.G. Heneman, "Effects of Age and Experience in Productivity," Industrial Gerontology, Spring 1977.

in productivity indicates that, for older workers in this study, productivity was fully as variable as that of younger workers. Whether this same phenomenon is true in other types of work situations is a subject for new and continued research.

How particular workers will perform in particular jobs is a key personnel selection issue that is equally salient whether hiring new workers or promoting persons already employed. Dimensions like education, height, weight, and age provide convenient administrative criteria for selecting-in or selecting-out, since each dimension represents a continuum from which a single slice can be chosen. But is it the "right" slice? Why, for example, should an individual one day older than an age limit be deemed inappropriate for the job? How much capability does someone lose in a single day? Such questions underly the move to apply the functional approach to the job problems of middle-aged and older workers.

According to advocates of this approach, selection should be made on the basis of job-relevant dimensions only. Unless age per se can be directly tied to job performance requirements, it should not be considered in hiring and promotion decisions.

In order to establish appropriate job requirements, task analysis may be needed. It should provide not only information about the skills, knowledges and abilities needed to do certain tasks, but should identify the level of skills, knowledges and abilities required. Then workers can be judged on the basis of their capabilities, regardless of age.

While no single task-analysis methodology has clearly demonstrated effectiveness and general acceptability, a variety of techniques do exist and have been used with varying degrees of success. What needs more attention is the development of a systematic framework for describing human abilities, since most existing systems deal with but a portion of the human abilities spectrum. Even for those systems that are more comprehensive, considerable additional effort is required to establish valid relationships between specific abilities and different jobs or job tasks.

As a longer-term goal, national norms regarding cognitive, perceptual, psycho-motor, and physical abilities might be developed for adults on an occupation-specific basis. Performance capabilities of older workers could then be readily compared with those of younger workers, and equally important, the norms could provide a useful benchmark for employers.

PART-TIME WORK, NEW WORK-TIME ARRANGEMENTS, AND WORK RESTRUCTURING

PART-TIME WORK

Surveys of the retirement intentions of middle-aged and older workers almost invariably include questions of an either-or character regarding full-time work or full retirement, with no middle-range alternatives. This approach results in little useful knowledge regarding: (1) the potential labor supply for voluntary part-time work; (2) the proportion interested in occasional or intermittent employment; or (3) the "market" for a policy of tapered or gradual retirement. (A variant of part-time work, this last could just as well be viewed as part-time retirement.)

In a study designed to overcome these limitations, Jacobsohn found that older British factory workers gave different responses regarding retirement preferences, depending on the kind of question asked. When asked the either-or type, 55 percent preferred complete retirement, but when offered a choice, only 21 percent chose such complete withdrawal from work. Moreover, the proportion citing a preference for continued full-time work fell from 44 percent when asked the either-or question to only 15 percent when the question was re-phrased to include part-time or occasional work. More than three-fifths, it turned out, preferred part-time or occasional employment.65/

Research using a similar approach and disaggregating responses by type of occupation and industry, age, sex, race, and other characteristics is lacking in the United States, even though such information would be valuable to employers and Government (not to mention the individual preretiree, who may otherwise be encouraged to think in either-or terms regarding employment in the later years).

65/ Jacobsohn (1970 unpublished report provided to the author).

On the other hand, the advantages of voluntary part-time employment may be more obvious to the middle-aged and older worker than they are to the organization or employer, but there is little in the way of research evidence on the latter point. One study, which makes no reference to age, did find, through personal interviews and mail questionnaires among users and non-users of part-time employees, that there was little net positive effect on the economic side and that the work technologies used had little relationship to ratings. The vast majority of such jobs consisted of discrete and primarily repetitive tasks, and many featured cyclical demands for output. In general, part-time jobs were more acceptable to non-traditional, change-oriented managers, and organizations with a more informal "organizational climate."

A first step in assessing the market for voluntary part-time employment should consist of sophisticated analysis of the distribution of voluntary part-time employment by industry and occupation, with special attention to industry. In 1976, for example, voluntary part-time employment was disproportionately over-represented in wholesale and retail trade and in finance and other services. Unfortunately, the available statistics provide no information by age in each industry.

While the total number of persons working part-time voluntarily increased by 41 percent from 1966 to 1976, the rate of increase in the case of the group aged 45 and over was much lower, at 25 percent. This, plus the fact that the total numbers employed on a full-time basis increased very little in the case of the group aged 45 to 64 and actually decreased among those 65 and over, raises the question of whether or not efforts must be increased to expand opportunities for voluntary part-time employment for older persons. The facts indicate that "opportunities" for such employment increased at a greater rate than opportunities for full-time employment, even when those aged 65 and over are omitted from the analysis. From 1966 to 1976, full-time jobs for the group aged 45 to 64 expanded by only 2.6 percent, compared to a 26 percent expansion of voluntary part-time jobs in the same age group.66/

66/ 1977 Employment and Training Report of the President.

However, these data tell us nothing regarding reasons for lower rates of increase in voluntary part-time employment for the older age groups, or for the greater increase in part-time vs. full-time employment for the group aged 45 to 64. Nor do they give us any clues as to whether the latter phenomenon is a socially desirable one.

Other questions stimulated by these data include the following:

--in which industries and areas have there been the most and least significant increases in part-time employment, both voluntary and involuntary?
--how is part-time work distributed by sex and race?
--how do changes in the degree of opportunity for full-time and less than full-time work (especially when the latter is voluntary) affect the "discouragement" process?

Any research and program focus on part-time work would be improved by treating such employment as only one pattern available to older workers in a spectrum which includes:

--continued full-time employment in the same occupation with the same employer;
--continued full-time employment with the same or a different employer, but in a different occupation;
--part-time employment with the same or different employer in the same occupation;
--part-time, with the same or different employer, in a different occupation;
--voluntary intermittent employment.

The term "part-time" itself can be misleading, since it encompasses a broad spectrum of possible work schedules. Furthermore, at a certain point in the worklife cycle, individual workers may choose, or be encouraged to choose, a gradual tapering down of total working hours or days per week (or even weeks per year).

Research in this area would require identification of factors and conditions that are associated with different patterns of work-time distribution on the part of older workers, by occupational groupings, family situation, etc. Equally important, of course, is the extent to which employing organizations, both public and private, can actually function with altered work-time patterns, the conditions under which such organizations can be induced to initiate such personnel practices, the role of unions in facilitating or hindering the introduction of such patterns, etc. Also, it is not clear how much of older workers' desire for part-time work is unmet because of their lack of information regarding the availability of such employment. It may be useful to conduct experimental and demonstration programs designed to improve the match between older workers seeking various forms of part-time employment and employers seeking such persons, or who could be persuaded to hire them.

Finally, there is at the present time no comprehensive picture, based on empirical research, regarding:

- --the distribution of, and trends in, work-time patterns by age, industry, and occupation;
- --worker and employer evaluations of these patterns;
- --projected employee and employer demand for such types of work-time distribution; and
- --cost-benefit analyses of these types.

Juanita Kreps, commenting on the need for research on the general topic of work-time options for older workers, stresses the following point:

> [It] would be useful to business organizations, public employers, and union officials in determining whether their employees and constituents would prefer a second career or early retirement, should such options be available. *In the absence of such evidence on desired work-leisure patterns, the free time generated by economic growth will be used in ways not necessarily compatible with preferences. It is also difficult to predict the degree to which firms could accommodate to worker preference without some evaluation of the institutional constraints operating against career flexibility* (emphasis added)[67]

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[67] Juanita Kreps, "Career Options After 50: Suggested Research", *The Gerontologist*, Spring 1971.

It remains to be determined whether part-time employment is worth pursuing as a national goal or policy. Furthermore,

(1) do such employment patterns suggest that the mainstream of the labor force is moving towards a general pattern of reduced working hours?

(2) would restrictions on the number of part-time jobs increase full-time opportunities -- and for which groups, if at all?

WORK SHARING AND FLEXITIME

Work sharing, flexitime (on less than a full-week basis), and similar modifications of the work-week can be considered variants of part-time employment, at least as far as older workers are concerned.[68] However, few, if any, of the numerous research studies completed to date include considerations of the age factor.

Tapered or "part-time retirement" is another variant, which is discussed in other sections of this report.

These separate items can be conceptualized as facets of the lifelong allocation of time, or the lifetime distribution of work, leisure, and education. This approach highlights the issue of how societies and economies "decide" who shall learn, work, and not work over the total lifespan.

The topic of lifelong allocation of time is both issue-laden and replete with long-term research potential. For the immediate future, the sub-topic of mid-career change and development is of considerable interest. That dimension of the lifespan approach is treated in a separate section of this report.

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[68] State of Wisconsin, Project Join, Phase I Report, "Demonstration Project to Test Job-Sharing in Wisconsin Civil Service," Employee Relations Division, May 1977; Albert S. Glickman and Zenia H. Brown, Changing Schedule of Work: Patterns and Implications (Kalamazoo, Mich.: W.E. Upjohn Institute for Employment Research), March 1977; Archibald A. Evans, Flexibility in Working Life: Opportunities for Individual Choice (Paris: Organization for Economic Cooperation and Development), 1973; Stephen J. Baum and W. McEwan Young, Flexible Working Hours (Noyes Data Corporation), 1974; Reed T. Kimzey and Samuel M.O. Prince, Flexitime: A Modified Workforce Scheduling Technique for Selected Headquarters Air Force Logistics Command Organizations (Springfield, Va.: National Technical Information Service), 1974.

Apart and distinct from time-allocation is another category of alternative work arrangements -- restructuring of work and work environments -- which has been discussed extensively in the literature on job satisfaction, job redesign, job enrichment, and "quality of work."

One of the ways in which work restructuring bears most directly upon the job-related problems of middle-aged and older workers is with respect to retirement. Jacobsohn found that workers' acceptance of their companies' retirement age was clearly related to their level of job strain and the degree of worker autonomy permitted in job performance, while Andrisani discovered through analysis of the NLS data that early retirement was a function of job dissatisfaction for both whites and blacks, regardless of health status.[69/] Significantly, an increase in the economic rewards of the NLS sample of middle-aged and older men over the 1966-71 period did not prevent a decline in satisfaction in this same period.

A 1972 analysis of the quality of task levels among white male blue-collar workers (i.e., degree of variety, autonomy, and responsibility) found that the lower the task-quality level, holding age constant, the greater the proportion of respondents indicating that they would retire immediately if assured of adequate income.[70/] More important, UAW data for 1972-73 indicate that actual departure rates among workers eligible for "30-and-out" retirement varied according to skill-level: the higher the skill, the lower the rate.

Quinn's analysis of the University of Michigan Survey of Working Conditions showed that low job autonomy was associated with early retirement for men, but not for women.

[69/] Dan Jacobsohn, op.cit.; Paul J. Andrisani, "Effect of Health Problems on the Work Experience of Middle-Aged Men," Industrial Gerontology, Spring 1977.

[70/] Harold L. Sheppard, "Job Tasks and Workers' Lives," op.cit.

Possibly this indicates that work is still a more significant portion of daily life for men than for women. This may change, however, as women become more regularly attached to the labor force over a greater portion of their lives.[71]

> Andrisani's analysis of the NLS data found that:
> --regardless of the state of the economy, dissatisfied middle-aged males were more likely than satisfied ones to change jobs voluntarily;
> --black middle-aged males --but not whites --who were dissatisfied with their jobs and who changed voluntarily made greater advances in job status and earnings in subsequent years;
> --with the exception of blacks, job satisfaction among the middle-aged declined from 1966 to 1972.[72]

The reasons for these relationships and trends should provide some basic guidelines for research regarding the qualitative job problems of middle-aged and older workers. The decline in job satisfaction among the non-changers in the NLS sample is a case in point. Current thinking regarding labor turnover and mobility (which are partly a function of job satisfaction) is somewhat contradictory. On the one hand, there is concern about the cost of turnover, especially at the organizational level. On the other hand, there is an emphasis on the value of labor mobility in promoting a rational and productive functioning of the economy. If job satisfaction among job-stayers does decline, even among middle-aged and older workers who are often assumed to have become "satisfied" over time, this might lead to various kinds of diseconomies and costs to the firm, indirectly to the total economy.

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[71] Survey of Working Conditions, op.cit.

[72] Paul J. Andrisani, et al. Work Attitudes and Labor Market Experience (Philadelphia: Temple University Center for Labor and Human Resource Studies) 1976.

EMPLOYER PRACTICES, MID-CAREER CHANGE, AND INTERMEDIARY ORGANIZATIONS

EMPLOYER PRACTICES

Employer behavior and attitudes play a major role in determining the job status and in influencing the retirement decisions of older workers. Regarding employer practices, however, there is a need for concentrated research with respect to:

--hiring patterns, by age, at different levels in the organization and for different types of occupations;

--the validity and reliability of testing and other screening devices, if any, as far as specific age groups are concerned;

--training and promotion policies and practices; problems of "obsolescence;" degree of long-range personnel planning; collective bargaining arrangements, includeing seniority benefits; job redesign and task allocation.

The irrelevance of many formal hiring and promotion requirements to the skills actually required for specific tasks has been established rather clearly by past research. But other research has revealed that, in reality, a vast number of employers have no formal hiring requirements. In such cases, how do the older applicants fare, relative to younger ones? What are the images the "gatekeepers" have regarding older worker capabilities and job performance, and how do differences in these images influence differences in hiring rates at each job level? And, after hiring, what is the "organizational career" of both the older new-hires, and other workers as they themselves grow older?

At the other end of the internal labor market spectrum is the question of what factors enter into employer decisions to dismiss or retire workers in different upper age groups. Company policies and practices that contribute to, or prevent, the "obsolescence" phenomenon among middle-aged and older workers should also be given serious research attention on an industry-by-industry basis.

There is no solid behavioral information on the extent to which "ageism" prevails as a part of the total employment process. The Harris survey of 1974 found that, among persons aged 18 to 64 with "responsibility for hiring and firing," the proportion agreeing that "most employers discriminate against older people and make it difficult for them to find jobs" was higher than for the total public sample. Furthermore, they were less likely than others to believe that "most older people can continue to perform as well on the job as they did when they were younger."73/

In another study, managers were presented with a number of hypothetical administrative incidents in which an employee's age could have an influence on a managerial decision.

The results clearly demonstrated that stereotypes about older employees' physical, cognitive, and psychological characteristics lead to discrimination against older persons, regarding selection, promotion, and training opportunities.74/

Obsolescence. Conventional wisdom suggests that there is some sort of natural and inexorable decline in learning capacity among older workers which is rooted in biological change in the total organism. Gerontology and related disciplines, on the other hand, emphasize the need to consider "environmental" and job-specific variables in dealing with this critical issue -- critical because it impinges on employment and retirement policies in the public and private sectors. Some general findings regarding this issue include the following:

--learning and adaptability are multi-dimensional and multi-directional, i.e., there are many different features of learning and intelligence, and some dimensions may show decrements while others may show improvements over time.)

--there is greater variation and heterogeneity

73/ Louis Harris and Associates, The Myth and the Reality of Aging in America, 1974.

74/ Benson Rosen and Thomas H. Jerdee, "The Influence of Age Stereotypes in Managerial Decisions," Journal of Applied Psychology, 1976.

among older groups than among younger ones; human behavior, including learning and intelligence, shows great plasticity or modifiability, given the appropriate circumstances and intervention techniques.75/

As a concrete example of the importance of environmental factors, Gellerman and others have cited the influence on learning skills of remaining for a long time in one job:

> While it may be admirable to know one's job so well that it can be performed automatically, long-time conditioning to this robot-like performance becomes a liability when a new job must be learned. Because the individual has not been using his learning skills, he experiences difficulty mastering a new job.76/

This viewpoint reinforces the argument that jobs should be designed to challenge the individual and provide enough variety and diversity to prevent atrophy of learning skills. Such an argument applies especially to the middle-aged and older worker population.

The policy issue here is at least twofold: the degree to which the obsolescence process can be retarded and/or prevented by intervention techniques on the part of management, as well as by the individual and the education system; and what those interventions should be. The topic should be a rich ground for a number of experimental and demonstration projects, as well as for research on what is currently being done by employers.

75/ These general principles are extracted from the writings, cited earlier, of Baltes, Labouvie and Schaie.

76/ S.W. Gellerman, "Competence Loss," chapter in Management by Motivation (American Management Association), 1968.

The literature on obsolescence is extensive.[77] What is most pertinent in this context is the issue of how management practice and policy themselves contribute to obsolescence, and how they can be turned around to prevent it from developing.

Hinrichs spells out in great detail how "demotivation" can occur in an organization among middle-aged executives. Working on the basis of "expectancy theory," Heneman suggests that, as employees grow older, they develop a feeling that their work behavior frequently does not result in the goals toward which it was directed. Lowered motivation thus may not be a direct result of "aging," but a result of employer treatment of the older employee.[78]

Retention. Very often (perhaps more often than not), the contribution of older workers to the rest of the organization is neglected. The potential contribution will vary by type of organization and by industry, and it is on this point that research would be useful.

For example, one study discovered that older insurance agents who were retained past the age of 65 for a variety of other reasons turned out to be highly effective as occupational "socializers" of new younger agents -- but this finding was quite unanticipated:

> Nowhere in the company's literature on agent training, agency operation, etc., is the role of the retiree vis-a-vis socialization of recruits mentioned . . . this finding . . . represents a "surprise" or a discovery . . .[79]

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[77] See, for example, H.G. Kaufman, op. cit.; S.S. Dubin (ed.), Professional Obsolescence (New York: Lexington Books) 1971; and John R. Hinrichs, The Motivation Crisis, American Management Association, 1974.

[78] Ibid.

[79] Harris Schrank, "Organizational Characteristics and Socialization Outcome." Doctoral dissertation, Yale University, 1973.

The notion of retention is associated with that of seniority, or security. The value of seniority is demonstrated by the finding by Parnes and King that permanently-displaced middle-aged men, compared to a carefully selected control sub-sample, had fewer years of service in their previous regular job which they had lost involuntarily.[80]

Typically, but not exclusively, formal seniority rights have been more readily available to unionized than to nonunionized employees. It is not clear how many employees, by age group, in non-unionized establishments are protected by similar policies. Given the fact that a declining proportion of all American employees are unionized, what is the impact of that trend on job security? Compared with other workers of similar ages, what are the effects of seniority protection on middle-aged and older workers' psychological well-being, physical health, and mortality rates?

While there is little in the way of research evidence on the subject, one unpublished study of workers and managers in an auto parts plant indicates that the unorganized white-collar and managerial employees had higher levels of anxiety about job security than the unionized blue-collar factory workers.

Organizational adaptation to an older workforce. Some large organizations have begun to examine the need for new personnel policies regarding their older workforce, frequently in instances where the personnel planners recognize the implications of their workforce "growing older." The focus of these efforts has been on the obsolescence or "plateau-ing" phenomenon, among older, long-service employees and on the need for top management to view redeployment, midcareer change, retirement training, and "phasing out" in a positive manner. What the organization does for its older, long-service employees can affect not only that group itself, but also the younger employees who look forward to a full career with the organization. One firm's analysis of the problem of "levelling-off" of performance reveals that it has occurred in nearly all parts of the total structure, including its branches outside the United States. The significant aspect of this particular organization's self-analysis is that it stresses the fact that managers are not used to solving that problem, except through the "easy" and traditional path of early retirement or dismissal.

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[80] Parnes and King, op. cit.

It is not too unusual, either, for some managers in this organization to develop personnel policies and practices encouraging the reassignment of an individual older employee to a new task with little motivating or satisfying attributes -- thus leading the individual to want to retire as a means of "solving" the problem created by the re-assignment.

Among the suggested alternative solutions are the following:

--equal opportunity with other age groups for training and development;

--sabbaticals and leaves-of-absence, with adequate income protection (and option to return), for second-career opportunities *inside* and *outside* the firm;

--flexibility regarding reductions in level of responsibility;

--greater use of alternative work patterns, including the use of older long-service "retirees" as consultants;

--positive midcareer counseling, including the use of existing training and educational programs for remotivation and renewal.

This organization, like many others, has no management information system that tracks training in such as way as to determine whether or not the programs are being used equitably or to identify those who have not been trained. At the present time, the only age guideline used in the organization's career planning program is geared to preparation for leaving the firm at age 65 with no flexibility for *later* retirement (which is also undergoing scrutiny).

Personnel analysts in the organization know that certain jobs "last" only until the individual reaches ages 35, 45, or 55, but there has been no company policy established regarding such patterns and, more important, no clarification as to what the individual is supposed to do at the end of such "career spans." One result of this failure to plan is that many employees work past this so-called normal work-span, neglect their own career planning, and become "problem" employees -- either blocking career development for younger peers, and/or deteriorating in their own performance. The authors of this organization's report accordingly suggest acceptance of programs for normal career changes (in or out of the firm), with clear-cut standards and criteria.

One of the values of thinking out the worklife-span implications of an organization's age-structure in this manner is that it reduces undue company financing of early retirement income. It also permits retention of older personnel in positive work roles through a variety of flexible arrangements, and reduces the financial burdens of premature retirement to the individual and the collectivity.

Mid -Career Change. Employer policies regarding the older worker must include attention not only to problems of obsolescence, but also the phenomenon of occupational change, or a desire for such a change, in mid-career or even later. We cannot ignore of this phenomenon, since greater longevity may increase the odds that a number of intervening experiences between first job and permanent retirement will affect the individual's occupational identity and continued interest in a given occupation.

While job-changing is no longer a monopoly of the young there are also increasing numbers of dissatisfied adult men and women who, for a variety of reasons yet to be fully explored, do not actually make a change. These two phenomena should not be confused with each other. The first refers to actual behavior, the second to a propensity or aspiration which may not be realized.

Limited research in this connection has shown that persons who have frequently thought about making a change to an occupation substantially different from their previous ones make more successful adaptations if and when they become unemployed.[81] Unfortunately, few studies have focused specifically on this question. The NLS study uses simply a "net economic advantage" measure (in terms of wage differential) as a way of ascertaining an individual's readiness or propensity to take a new job, but only with respect to the same line of work. This propensity was related to age, but even so, more than half the workers 60 to 64 years old in 1971 also showed an employer-changing propensity. Moreover, the lower the level of job satisfaction and the higher the occupational status of these middle-aged male workers, the higher the propensity to change employers. Actual voluntary changes turned out to be related to the propensity measure. And the fact that age *per se* was not a factor in job-changing is a finding of major significance.[82]

There still remains the need to ascertain the "universe of need" for mid-career *occupational* change on national, area, and organizational levels, and by occupational, industrial, and demographic characteristics.

In his analysis of white male blue-collar workers, Sheppard used one approach for identifying what he called "candidates for second careers" by age groupings. "Candidates" were those workers who had frequently thought of making a major occupational change and who also would be willing to take a training or education program for a promotion. While the exact proportion of "candidates" in the middle-aged and older worker sample was not necessarily representative of all such blue-collar workers in the national labor force, the numbers were large enough to carry out a comparison of these candidates with the non-candidates, including social and political differences between the two groups. The analysis pointed to the possibility of greater frustration and resentment among the candidates.[83]

Research on this topic should attempt to measure:

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[81] Sheppard and Belitsky, *op. cit.*

[82] Herbert S. Parnes, *et al.*, *op. cit.*

[83] Harold L. Sheppard, "Job Tasks and Workers' Lives," *op. cit.*

--the extent to which there is an unmet need among different age groups for some type of mid-career change;

--the conditions under which such desires could be made reality;

--the relative costs and benefits of such changes to the individual, organizations, and the general economy, and hence, the degree to which active programs and policies should be shaped to facilitate the changes.

Middle-age and/or mid-career "crisis" is by now a popular and mass-media topic, as well as the subject of a number of clinical psychology and psychiatry publications. But this literature rarely, if ever, pinpoints the differences in job-related crisis among age groups. According to Brenner, however, certain adverse economic experiences and factors had a greater impact on middle-aged workers than on other age groups. For example, between 1945 and 1976, persons aged 45 to 54 in the "working age" population seemed to be most affected by levels of unemployment, as measured by deaths due to cardiovascular-renal diseases, and those 45 to 64 by inflation, as measured by the same causes of death.84/

This is only one example of the proposition that unemployment and other economic factors, such as inflation may be more serious for middle-aged and older workers than the conventional measures and studies might lead policymakers to believe.

Preliminary analysis of the NLS adult male sample suggests that the group aged 48 to 52 in 1966 were passing through a "critical" stage. For example, if white men in this age group had changed employers involuntarily, they were more likely than other involuntary changers (younger and older) to be out of the labor force by 1973. The evidence also suggests that individual unemployment experience in 1966 and area unemployment levels for that year had their greatest impact on the

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84/ M. Harvey Brenner, Mental Illness and the Economy (Cambridge: Harvard University Press), 1973, and "Estimating the Social Costs of National Economic Policy: Implications for Mental and Physical Health, and Criminal Agression" (Washington: Joint Economic Committee).

48-to-52 year-olds. Similarly with respect to health status: those self-reported in 1966 as having work limitations were most likely to be out of the labor force seven years later.

Further research is needed to determine whether the Brenner and NLS findings regarding white males can be replicated among minorities and women, not solely to establish whether the same age group is the most sensitive, but also to determine if any specific age group more than others reflects such sensitivities.

It would be useful, too, to discover whether the "critical" age span differs according to occupation and industry. In many technical careers for example, such crises might occur as early as the late thirties and early forties.[85] They may also be affected by managerial style and practices, the availability of mid-career development opportunities, etc.

INTERMEDIARY ORGANIZATIONS

On a more general level, greater policy and program attention may be necessary regarding the role of the public agencies in meeting the job-related problems of older workers. Recent national ESARS (Employment Security Automated Reporting System) reports note that the older the worker using the employment services, the fewer the services provided. They also find that the fewer the services, the lower the odds for finding a new job.[86] Such findings suggest the need for a strengthened effort to train and orient ES personnel regarding the needs of older workers.

On a broader, and perhaps more controversial level, some observers have noted the possibility that the creation of such "special" job programs for older workers as Title IX of the Older Americans Act may encourage a tendency on the part of intermediary organizations to neglect such persons as far as other employment and training opportunities are concerned.

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[85] Lotte Bailyn, "Involvement and Accommodation in Technical Careers," in Career Paths in E/E Education, Institute of Electrical and Electronics Engineers," 1976.

[86] Elizabeth Heibreder and Michael Batten, ESARS II: A Comparative View of Service to Aged Groups (Washington: National Council on Aging) 1974.

To what extent is there such a tendency? Moreover, among the contracting organizations given the responsibility of managing such Title IX programs, might there not also be a tendency to siphon applicants from other programs into their own, in order to reach their quotas? If so, the result might be a net decrease in overall employment opportunities for older workers.

The Administration on Aging is funding a nationwide study conducted by the Human Resources Research Organization (HUMRRO), to be completed in mid-1978, which deals with employment assistance and services for jobseekers 55 and older. It will include an analysis of services provided to older jobseekers by State employment security offices, including information gathered through interviews with local agency staff who are responsible for planning and supervising services to older jobseekers The HUMRRO project will also include an analysis of the role of voluntary, nonprofit employment organizations in the jobseeking experiences of workers aged 55 and over.

The role of such organizations might well be expanded. Medium-sized and very small firms frequently do not use either public or private employment agencies, but may be responsive to outreach efforts by nonprofit organizations serving older workers. A special report, aimed at providing models to private sector employers for the use of such organizations, is now being prepared by Rosenblum and Sheppard for the Economic Development Administration The report will also provide case studies of private employer practices regarding retention, re-hiring, and retirement of older workers.

TRAINING AND EDUCATION

Lower levels of educational attainment have been cited in the literature of the past few decades as a critical factor in the disadvantageous position of older workers in external and internal labor markets. In the past, it is true, older workers were clearly less educated than younger ones. As recently as 1966, the median years of schooling for men who were 55 to 64 years old and in the labor force, as a percentage of the median for men aged 25 to 34, was only 77.7. Ten years later, however, the percentage was much higher -- 94.6 -- thus revealing hardly any difference, as far as this particular measure is concerned, between older and younger male workers.

A similar comparison for females reveals that the change from 1966 to 1976 in the gap between the older and younger women was very slight -- but median years of schooling for older women in the labor force were already quite high in 1966: 11.6 years for women, in contrast to 9.7. for men.

Given these trends, can we rely any longer on educational differences as an explanation for the labor market problems of older workers?

Perhaps, instead, the most important principle here is the optimal role of recurrent education and training as an antidote to human capital obsolescence. Thus, programs allowing the older worker to keep abreast of current technology and changing skill requirements should be given greater priority than at present.

The current tendency to take workers whose skills are already obsolete and enroll them in formal coursework is insufficient and does not address the central issue. This, of course, is no argument against providing training opportunities for older workers in order to meet transitory conditions, especially if the programs are designed to meet any special learning problems such workers may have.

Analysis of the NLS data indicates that training received prior to 1966 (the first year of the NLS survey) had little effect on weeks out of the labor force, or weeks unemployed, although this inconclusive finding may have been a result of the nature of the sample. (Only men with at least 35 weeks in the labor force in the year preceding the survey were included.) But if trained in business and technical schools prior to 1966, both blacks and whites received higher annual earnings as of 1966 than those without prior training experience. Among whites only, training obtained from company schools produced similar results.

More important, "investment in training" during middle-age was found to be highly correlated with previous training experience, and varied according to education, age, occupation, and race. In other words, participation in training programs during middle age was higher among: those with previous training, those with at least a high school education, those who were younger, those in white-collar and skilled occupations, and those who were white.

Overall, on the issue of the degree to which for declining participation in formal training accounts problems of middle-aged workers, the NLS data provide mixed answers. There were no consistently positive impacts on earnings and employment, contrary to expectations. Apparently, this generalization was applicable primarily to the whites in the sample. For blacks who participated in company training programs prior to 1966, the economic effects were substantial. However, a very small percentage of blacks had been in such programs, which by itself is a finding with important policy and program implications.

The NLS study, unfortunately, does not concentrate on the cost-benefit dimensions of training for either the firm or for the broader society and economy. More important, it must not be forgotten that information regarding the "middle-aged" men of 1966 is not a reliable basis for understanding the "middle-aged" men of the late 1970's and beyond, since median levels of education have risen in the interim. Given the NLS finding that education was a predictor of participation in job training programs, we might expect different findings among today's -- and tomorrow's -- middle-aged male workers.

Little of this discussion of the NLS data bears directly on the issue of the value of training to the following kinds of middle-aged and older workers: (1) the unemployed and underemployed; (2) nonparticipants in the labor force; (3) women; and (4) minority groups. Nor does it deal with the issue of the kinds of training or training methods that may prove more effective than others.

For example, Jakubauskas and Taylor found that on-the-job training was effective among hard-core unemployed older workers, as long as they otherwise had no serious handicaps. Somers found that unemployed older workers in various projects benefited from the training they received. Special tabulations of 1965 MDTA data for the Senate Subcommittee on Employment, Manpower, and Poverty revealed that, once recruited and registered, older men tended to complete their training programs more often than younger trainees. More important, these same data indicated that continued employment 1 year after training was just as common among older workers as among younger ones.87/

On the social cost side, the 1967 Somers report found that older trainees in West Virginia were less dependent, after training, on social welfare payments than nontrainees of the same age--but few attempts have been made to replicate these findings elsewhere.

Finally, we cannot ignore Somers' observation that older trainees improved their employment opportunities despite their lower level of formal schooling. This findings tends to throw doubt on the suggestion (albeit tentative) of the NLS study that training is effective only among those whose formal education is already better than average. But, as the NLS report itself admits, the anslyses are restricted to a selected sample, tending to exclude hard-core unemployed older workers.

87/ Edward B. Jakubauskas and Vienna Taylor, On-The-Job Training and Reemployment of Older Workers; Gerald Somers, "Evaluation of Work Experience and Training of Older Workers (Washington: National Council on Aging), 1967.

According to one study, older workers, once trained, plan to remain with their employers longer than younger trainees. To the extent that turnover is a cost factor for employers, this intention-to-stay should constitute a benefit and possibly one more argument in behalf of providing greater training opportunities for such groups.88/

In another study of the consequences of a joint classroom and OJT training project for women 50 to 79 years old, it was found that, despite their low levels of formal schooling, they began to earn higher wages than a control group not undergoing any training.89/ This type of finding suggests not merely an improvement in the economic conditions of persons undergoing training, but the possibility that training may even result in a reduction in transfer payments, a factor which needs to be considered in weighing the arguments for and against improved training opportunities for older persons.

The fact that some older workers tend to be less interested than younger ones in learning new skills or participating in job training programs should not detract from the further fact that many of these adult and older persons are nevertheless interested in such opportunities. For example, nearly half the employed 40 to 54 year-olds in the 1974 Harris Survey expressed such an interest. Among those 55 to 64, the proportion interested was 37 percent, and among those 65 to 69, 21 percent.90/

The overall conclusion of the Harris report on this topic was that "there is apparently a serious need in this country today for career planning and job training programs for people of all ages . . . . Government and the

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88/ D.B. Newsham, "The Challenge of Change for The Older Trainees," Industrial Gerontology, October 1969.

89/ G.G. Fillenbaum and E. Willis, "Effects of a Training Program," Industrial Gerontology, Fall 1976.

90/ Louis Harris and Associates, The Myth and the Reality of Aging in America, 1974.

private sector have until now aimed their job training efforts where the demand is greatest: among young people in their 20's and 30's. What this study reveals, however, is a substantial demand for similar programs by people in their 40's, 50's and 60's."

The demand, nevertheless, needs to be clarified, e.g., who are the older workers (by sex, race, occupational experience, and interests) "demanding" such programs?

Training methods. There is little in the evaluation research literature concerning the training experience of older workers under CETA or MDTA and related programs that focuses on the effects of different training methods. Industrial gerontology and developmental-educational psychology tend to stress the critical nature of the learning process among groups from different eras (50 year-olds in 1965 vs. 50 year-olds in 1975, for example). In an experiment with very young and very old subjects, Siemer used programmed learning to teach them a "neutral" topic-- in this case, anatomy and physiology. The results indicated that the "time-honored stereotypes" of an age-related decline in learning and trainability were not supported. The older subjects did take longer to learn, but the use of programmed learning improved the pattern of the older persons in the experiment, whose average age was over 72. Siemer argues that "educators, employers and government officials are going to have to re-examine their beliefs about the utility and trainability of older people."[91]

On the other hand, Neale, Toye, and Belbin used programmed instruction in a non-laboratory, real-life work situation involving training of London bus-drivers and found that it was more effective than traditional classroom methods among younger workers only. The older workers performed better when trained in the traditional setting; they were less familiar with programmed learning

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[91] J.R. Siemer, "Programmed Material as a Training Tool for Older Persons," Industrial Gerontology, Summer 1976.

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formats, and had to "learn how to learn" from them, "Older people do not learn better or worse; rather, they learn best under different conditions."[92]

Eunice and Meredith Belbin have designed the Discovery Method, a new approach to occupational training of workers of all ages. In simplified form, the term refers to the value of having trainees discover for themselves (but in a planned fashion worked out by trainers) how things work and why.[93]

The approach requires that the trainer develop "a path of exploration that allows the trainee to progress continuously." The method seeks to develop skill and task understanding through techniques other than strictly verbal instruction or physical demonstration by the teacher. "Tasks and problems, graded in difficulty, are presented according to the trainee's existing knowledge and progress." Through solving the problem, the trainee acquires understanding which later can be organized and strengthened by group discussions and lectures. The Discovery Method should not be confused with passive observation or with "learning easily-assimilated items bit by bit" as in most linear programmed learning.

The Belbins also stress the need to recognize that (1) persons of low learning capacity may have acquired a negative attitude toward training situations in which failure has already been experienced; (2) adults must be allowed to find their own way of building on past knowledge, and to use their own way of assimilating the new; (3) the training methods should provide rapid feedback regarding results; and (4) non-verbal learning is to be valued more than verbal learning among older trainees.

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[92] J.G. Neale, M.H. Toye, and E. Belbin, "Adult Training: The Use of Programmed Instruction," Occupational Psychology, January 1968.

[93] Eunice Belbin and Meridith Belbin, Problems in Adult Retraining (London: William Heineman Ltd.) 1972

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SELECTED FOREIGN PROGRAMS AND POLICIES

A number of countries have employed measures regarding older workers that might be explored for program, research, and policy consideration in our own country.

TAPERED RETIREMENT

A recent measure is Sweden's widely publicized new policy regarding tapered retirement. It has been termed the National Partial-Pension Scheme and allows workers aged 60 to 65 to reduce their working hours while receiving partial pensions.[94] One of the reasons for the scheme cited by the Swedes is that they believe that a "sudden switch from working life to full retirement can be detrimental to many workers."[95]

The new plan will be evaluated by sociologists at the University of Stockholm. There is as yet no information available concerning: 1) the number of Swedish workers who have sought to take advantage of this new alternative to total retirement, and 2.) the number of Swedish employers who have made such opportunities available. While recognition of the "right" to a partial pension was an important first step, it is up to Swedish unions and employers to work out specific arrangements on an industry-by-industry or company-by-company basis.

Although the program is only two years old, it may warrant exploration by the United States, given the growing interest in part-time opportunities for older workers. Examination of the lessons gained from the Swedish program may assist in designing similar projects in specified companies and government agencies, or in developing legislative proposals.

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[94] It should also be pointed out that Swedish workers deferring retirement beyond the age at which full benefits are available receive a deferral "bonus" for each month worked beyond that age, until they reach 70.

[95] Kenneth Bratthall, "Flexible Retirement and the New Swedish Partial - Pension Scheme," Industrial Gerontology, Summer 1976.

The American Retirement History Study of the Social Security Administration includes an examination of the 1973 labor force status of those surviving from the original 1969 sample. Preliminary findings indicate that gradual or tapered retirement is more common among the self-employed than among wage and salaried employees. On the other hand, economic pressures apparently play a role among the wage and salaried, as suggested by the finding that low earners have higher proportions of "gradual withdrawers" than high earners.

Other questions remain to be answered:

--in what types of occupations and industries (holding previous earnings constant) are gradual retirees located?

--do they remain in their previous industries and occupations?

--if not, in what types of industries and occupations do they find opportunities for such gradual, or tapered, retirement?

--in which industries might employers be the most willing to attempt to introduce a partial-pension, partial-work policy? What incentives are required?

Answers to some of these questions might also be sought at the enterprise or establishment level, through inquires among such organizations (by industry and occupation) concerning gradual retirement policies and practices. Such research would shed light on the issue of retention of older workers, in contrast to policies favoring the displacement of older workers, who then have to seek part-time employment for a variety of reasons and typically under less advantageous conditions.

VOCATIONAL TRAINING AND LAYOFF ALTERNATIVES

Sweden also places a primary emphasis on vocational training for older adult workers, to assist them in retaining their current employment or in seeking new jobs elsewhere. Cash payments are available to make up for any wage loss, as well as materials, transportation, and other training-related costs. If forced to transfer to lower-paid jobs, older workers are also eligible for a subsidy to make up part of the difference between the old and the new rates.

Swedish companies, moreover, have "Adjustment Committees," created to meet some of the problems of those (especially older workers) who may be affected by financial problems of the firm. In existence since 1972, these committees consist of representatives of management, union, and the local Labor Market Board (whose activities include the function of our own public employment service offices).

Whenever a company is faced with a need to reduce its workforce, such adjustment committees seek alternatives to final layoff decisions by providing funds for work redesign, including new equipment or through reassignments or subsidies to the employer. The committees are authorized to use medical officers, safety engineers, and industrial psychologists as consultants in making their decisions regarding the retention and disposition of older workers who are exposed to the risks entailed in outright dismissal or early retirement.

With appropriate modifications to the American scene, demonstration programs based on this model might be attempted in selected companies, or such committees might be made part of a broader program for assisting firms and employees facing economic problems or major personnel reorganizations.

MOBILITY ALLOWANCES

In West Germany, the long-term unemployed (typically the older workers) were recently provided with special opportunities for mobility allowances, particularly if the new job (which must be available in the first place) means a loss of more than 15 percent in earnings or if it is a new type of job, even if no loss in earnings is expected. The financial assistance provided is on a sliding scale, depending on length of unemployment; the greater the duration, the greater the amount provided.

Germany, it may be noted, has experienced job-related problems among older workers even when it was enjoying an otherwise high level of employment, which suggests that structurally-determined older worker unemployment is not unique to the United States. A great deal of effort has been expended in:

--educating management with regard to the special training needs of older workers, regardless of current employment status;
--more appropriate personnel planning, taking into account the "aging" of the internal workforce;
--emphasizing continuing training programs to maintain the job security of older workers, as well as early training and retraining to prevent problems for future cohorts of older workers.

Furthermore, grants or subsidies of up to 60 percent of wages for one year are available to employers who hire "hard-to-place" workers, including older persons.

Contrary to the general position of American labor, the DGB (German Federation of Labor) is not in favor of early retirement for its older workers as a way of meeting problems of unemployment. It favors, instead, greater termination pay allowances and longer-term unemployment compensation payments for persons over 50. It also endorses job redesign where necessary, and the setting aside of "special" jobs for older workers. Some labor-management agreements actually include blanket prohibitions of dismissals of workers over the age of 50 or so (in the North Wurttemberg-Nordbaden metal industry, for example).

SPECIAL TRAINING

Great Britain is best known for its emphasis on programs of training using special instruction techniques tailor-made to the learning processes of adult and older workers.

This approach is discussed elsewhere, but is mentioned here to re-emphasize the value of such approaches in regular training programs which include older workers. A series of experimental and demonstration projects specifically designed to train and retrain trainers in these special techniques might be useful in the United States.

DELAYED RETIREMENT

Japan, where the traditional retirement age is 55, is only now facing up to the consequences of the dramatic rise in life expectancy of its older working population. Some trade unions are actively seeking a later retirement age, in order to mitigate the process that produces a secondary or dual labor market consisting of persons 55 and older who are forced to take lower-status and lower-paying jobs because of the traditional retirement policy.

More specifically, Japanese programs include:
- --subsidies to companies hiring older workers;
- --employment quotas in government agencies for occupations defined as especially appropriate for older persons;
- --employment quotas in the private sector. The Ministry of Labor is also authorized to require companies with more than 100 employees to conduct affirmative action programs with quotas;
- --finally, the Ministry is working now on policies designed to change the retirement age from 55 to at least 60, apparently with some effect.

OTHER APPROACHES

Norway has programs similar to some of those described above. Other programs and policies include:
- --long-term advance lay-off notice to workers over 50;
- --special public employment programs;
- --special education in such matters as the application of functional age criteria to specific occupations;

- --pilot projects designed to provide therapeutic and preventive measures and services for special groups of workers, including those in high-risk working environments;
- --removal of upper-age limits in admissions to vocational courses.

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